

COUNTY COUNCIL OF NORTHUMBERLAND.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

(WM. F. J. WHITLEY, M.D., D.P.H., F.R.S.E.),

for the Year 1933.

NEWCASTLE-UPON-TYNE:

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1934

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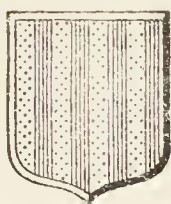
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NORTHUMBERLAND COUNTY COUNCIL.

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH FOR THE YEAR ENDED 31st DECEMBER, 1933.

TO THE CHAIRMAN AND MEMBERS OF THE COUNTY COUNCIL
OF NORTHUMBERLAND.

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

I beg to present my annual report for the year 1933. The report has been drawn up on the lines indicated by the Minister of Health in his Circular No. 1346 relating to the contents and arrangement of the annual reports of medical officers of health for the year 1933.

Vital and Mortality Statistics.—The vital and mortality statistics of the various county districts have been calculated and are included in the report. The variations in the principal county rates during recent years are indicated in the following table. The corresponding rates for England and Wales are given for comparison :—

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Birth rate (per 1,000 living)										
Administrative county ...	22·2	20·8	20·02	17·90	18·37	16·79	17·13	16·66	15·94	15·42
England and Wales ...	18·8	18·3	17·8	16·6	16·7	16·3	16·3	15·8	15·3	14·4
Infant death rate (per 1,000 living)										
Administrative county	12·1	11·6	11·37	11·53	11·39	12·22	11·02	12·24	11·33	11·93
England and Wales ...	12·2	12·2	11·6	12·3	11·7	13·4	11·4	12·3	12·0	12·3
Infant mortality rate (per 1,000 births)										
Administrative county	83	82	77	77	67	81	62	77	67	71
England and Wales ...	75	75	70	70	65	74	60	66	65	64
Specific death rate (per 1,000 living)										
Administrative county	0·40	0·67	0·53	0·27	0·28	0·65	0·23	0·41	0·25	0·31
England and Wales ...	0·45	0·54	0·44	0·38	0·40	0·47	0·37	0·32	0·33	0·29
Rate from Respiratory Tuberculosis (per 1,000 living)										
Administrative county	0·82	0·78	0·73	0·81	0·68	0·74	0·78	0·75	0·68	0·65
England and Wales ...	0·84	0·83	0·77	0·79	0·76	0·79	0·74	0·74	0·69	0·69

The birth rate for 1933 again showed a decrease when compared with that for the previous year, the rate (15.42) being the lowest recorded for the County. It was, however, higher than the rate for England and Wales.

The general death rate showed a slight increase on the rate for 1932. With a decreased birth rate and the consequent alteration in the age groups of the population, it is inevitable that the death rate must rise.

The infant mortality rate was higher than that for 1932, but lower than the average rate for the 10 years preceding; here again there were fewer births and slightly more deaths (15) which has increased the rate somewhat disproportionately.

The death rate from zymotic diseases was slightly higher than that for 1932.

A further reduction was shown in the death rate from respiratory tuberculosis, the rate (0.65 per 1,000 of the population) being the lowest so far recorded for the county.

Annual Reports of District Medical Officers.—The following list shows the dates upon which the various reports were received :—

1934

March. 14th, River Blyth Port Sanitary Authority.

April. 3rd, River Tyne Port Sanitary Authority.

May. 9th, Rothbury U.D.; 17th, Alnwick U.D.; 30th, Castle Ward R.D.

June. 1st, Whitley and Monkseaton U.D.; 2nd, Morpeth Borough; 9th, Rothbury R.D.; 13th, Belford R.D.; 15th, Bedlingtonshire U.D. and Hexham R.D.; 16th Alnwick R.D.; 21st, Morpeth R.D.; 22nd, Gosforth U.D.; 23rd, Seghill U.D.

July. 5th, Seaton Delaval U.D.; 7th, Hexham U.D.; 9th Ashington U.D.; 10th, Longbenton U.D.; 13th, Bellingham R.D.; 18th, Newbiggin-by-the-Sea U.D.; 19th, Wallsend Borough; 23rd, Haltwhistle R.D.; 26th, Newburn U.D.; 27th, Earsdon U.D.; 30th, Norham and Islandshires R.D.

August. 17th, Weetslade U.D.; 22nd, Cramlington U.D.

Sept. 17th, Glendale R.D.; 19th, Amble U.D.; 27th, Prudhoe U.D.; 29th, Blyth Borough.

October. 1st, Berwick Borough.

Administration.

The official, technical and administrative staff under the direction of the County Medical Officer consists of :—

Senior Assistant County Medical Officer and Tuberculosis Officer ...	Wm. L. M. Gabriel, M.B., CH.B., B.HY., D.P.H.
Assistant County Medical Officer and School Oculist	James Stonehouse, B.A., M.B., B.S.
Assistant County Medical Officer and Infant Welfare Centre M.O. ...	O'Connell O'Sullivan, M.C., M.B., CH.B., B.A.O.
Do. do. ...	Mary W. Dewell, M.B., B.S.
Do. do. ...	Joyce L. Bunting, M.B., CH.B.
Assistant County Medical Officer ...	*John A. Smail, M.B., CH.B.
Do. ...	*Grahame Patton, L.R.C.P. & S.I., D.P.H.
County Bacteriologist, who is also Medical Officer of Health of the Newburn Urban District	Andrew I. Messer, M.A., M.B., CH.B., D.P.H.
County Tuberculosis Officer (Clinical)	Francis L. Moore, M.B., CH.B.
The Medical Superintendent of the Council's Sanatorium at Wooley, and Tuberculosis Officer	Robert Cunningham, M.B., CH.B., D.P.H.
Assistant Medical Superintendent of the Council's Sanatorium at Wooley	Sheila McMahon, M.B., CH.B.
Orthopaedic Surgeon	*William Mackenzie, F.R.C.S.
School Dentist	Catherine M. Anderson, L.D.S.
Do.	A. J. McKillop, L.D.S.
Do.	Arnold E. Robinson, L.D.S.
Do.	*Wm. G. Mitcheson, L.D.S.
County Health Inspector	Chas. Ward, C.R.S. Inst., Cert. M. & F., M.S.I.A.
County Analysts	*Dr. J. T. Dunn, and *H. C. L. Bloxam, F.I.C.
Chief Veterinary Inspectors ...	*Clement Elphick, M.R.C.V.S. *W. A. Doughty, M.R.C.V.S.
Matron of the Council's Sanatorium at Wooley	Catherine Connor, S.R.N.
Superintendent Health Visitor ...	Hannah Weir, S.R.N., C.M.B., H.V. Cert., R.S.I., S.I., Cert. R.S.I., Maternity and Child Welfare Cert.

* Part-time.

Health Visitors, School Nurses, Tuberculosis Nurses and Dental Nurses.

Ruth Atkinson, T.N., C.M.B.
 Bertha Barker, T.N., C.M.B.
 Alice Beecroft, T.N., C.M.B., H.V. Cert.
 Louisa Emily Belsham, T.N., C.M.B., H.V. Cert.
 Nellie Hamilton Bird, S.I.C.
 Lucy Esnee Brewis, T.N., C.M.B., H.V. Cert.
 Elsie Broadbent, T.N., C.M.B., H.V. Cert.
 Henrietta Chester, T.N., C.M.B., S.I.C.
 Patricia Cormack, T.N., C.M.B., H.V. Cert.
 Jessie Selina Dempster, T.N., C.M.B., H.V. Cert.
 Elsie May Dodds, T.N., C.M.B.
 Martha Gibson, T.N., C.M.B.
 Beatrice Mary Goodban, T.N., C.M.B.
 Ellen Grehan, T.N., C.M.B.
 Marjorie Hall, T.N., C.M.B., H.V. Cert.
 Alice Gwendoline Isabel Harper, T.N., C.M.B., H.V. Cert.
 Gertrude Harrison, T.N., C.M.B., H.V. Cert.
 Florence Hepton, T.N., C.M.B., H.V. Cert.
 Marjorie Hinbest, T.N., C.M.B., H.V. Cert.
 Gertrude Priscilla Ironside, T.N., C.M.B., H.V. Cert.
 Hilda Young Johnston, T.N., C.M.B.
 Frances Mary Jones, T.N., C.M.B., H.V. Cert.
 Ada Kay, T.N., C.M.B.
 May Makin, T.N., C.M.B.
 Annie McDermott, T.N., C.M.B.
 Anabella McLeod, T.N., C.M.B.
 Edith Elizabeth Rimer, T.N., C.M.B., H.V. Cert.
 Buddug Roberts, T.N., C.M.B.
 Lily Booth Taylor, T.N., C.M.B., H.V. Cert.
 Edna Godfrey Thomson, T.N., C.M.B., H.V. Cert.
 Frances Turnbull, T.N., C.M.B.
 Emma Weston, T.N., C.M.B., H.V. Cert.
 Eva Wolfenden, T.N., C.M.B., H.V. Cert.

Tuberculosis Nurse (only)—

Ida Emilie Bodin, T.N., C.M.B., H.V. Cert.

T.N.—General Trained Nurses.

C.M.B.—Certificate of Central Midwives' Board.

H.V.C.—Health Visitor Certificate of the Royal Sanitary Institute.

S.I.C.—Sanitary Inspector's Certificate of the Royal Sanitary Institute.

Orthopaedic Sisters... Hilda Arthur, C.S.S.M.G.

Alice M. Rogers, C.S.S.M.G.

Home Teachers under the ... Florence Mary Blair, Home Teachers' Cert.

Blind Persons Act Mary Davison Taws, do.

Dorothy L. Shannon do.

There was also during 1933 a clerical staff at the Central Office of 13 (including one laboratory assistant at the County Laboratory at Newburn).

In addition to the staff specified above, there were employed at Wooley Sanatorium :—

1 Clerk-Steward	3 Gardeners
1 Engineer	1 Porter
2 Enginemen	

Nursing Staff :

1 Home Sister	7 Staff Nurses
1 Night Sister	12 Probationers.
3 Ward Sisters	

Domestic Staff :

1 Cook	1 Nurses' Maid
1 Laundress	2 House Maids
3 Laundry Maids	2 Patients' Dining Hall Maids
2 Sewing Maids	5 Ward Maids
1 Staff and Store Maid	4 Kitchen Maids
1 Matron's Maid	2 Scullery Maids

ADDITIONAL OFFICERS.

MEDICAL OFFICERS OF INFANT WELFARE CENTRES AND ANTE-NATAL CLINICS.

(a) Infant Welfare Centres.

Centre.	Medical Officer.
Alnwick ...	*Joyce L. Bunting, M.B., CH.B.
Amble ...	*O'Connell O'Sullivan, M.C., M.B., B.CH., B.A.O.
Backworth ...	...Glen Davison, M.D., M.B., B.S.
Berwick ...	...P. W. MacLagan, M.D., M.B., CH.B.
Cramlington ...	†T. G. Quinn, M.B., CH.B.
Dudley ...	...Jane H. Thompson, M.A., M.B., CH.B.
Haltwhistle ...	†Jane H. Thompson, M.A., M.B., CH.B.
Morpeth ...	...Hugh Dickie, M.B., CH.B.
Newbiggin ...	...H. Hart-Jackson, M.R.C.S., L.R.C.P.
Pegswood ...	...Hugh Dickie, M.B., CH.B.
Prudhoe ...	*Mary W. Dewell, M.B., B.S.
Red Row ...	...W. G. Scott, L.R.C.P., L.R.C.S., L.R.F.P.S.
Seaton Burn ...	...A. G. Ogilvie, M.B., B.S., M.R.C.P.
Seaton Delaval	...Jas. Anderson, M.D., M.B., C.M., B.HY.
Seghill ...	...P. Henderson, M.D., L.R.C.P., L.R.C.S.
Shiremoor ...	†Jane H. Thompson, M.A., M.B., CH.B.
Stocksfield ...	...A. G. Ogilvie, M.B., B.S., M.R.C.P.
Whitley Bay ...	†Jane H. Thompson, M.A., M.B., CH.B.

* Also included under "Administration" page 7.

† Also M.O. of Ante-Natal Clinic at this Centre.

(b) Ante-Natal Clinics.

Clinic.	Medical Officer.
Cramlington ...	...(See under Infant Welfare Centres, above).
Dudley ...	...T. Craig, M.B., CH.B.
Haltwhistle ...	...(See under Infant Welfare Centres, above).
Prudhoe ...	{ G. McCoull, M.B., B.S., L.R.C.P., L.R.C.S. H. A. Lockhart, M.B., B.S.
Shiremoor ...	...(See under Infant Welfare Centres, above).
Whitley Bay ...	... Do. do.

OBSTETRIC CONSULTANTS UNDER MIDWIVES AND MATERNITY AND CHILD WELFARE ACTS.

Robert P. Ranken Lyle, M.D., B.A.O., L.R.C.P.I.
 Ernest Farquhar Murray, M.D., F.R.C.S.
 Henry Harvey Evers, M.S., F.R.C.S.
 Francis E. Stabler, M.D., F.R.C.S.

DISTRICT MEDICAL OFFICERS UNDER POOR LAW ACTS.

Guardians' Committee.	District.	County Area.	Medical Officer.
North No. 2	Alnwick ...	...Alnwick U.D.	*J. A. MacLeod, M.B., CH.B., D.P.H.
	Embleton ...	...Alnwick R.D.	...F. J. Fell, L.R.C.P. & S. (Ed. L.R.F.P. & S. (Glas.)
	Felton... ...	... Do.	...R. A. Welsh, M.B., B.S.
	Glanton ...	... Do.	...B. W. E. Trevor-Roper, M.R.C.S., L.R.C.P., M.B., CH.B.
	Lesbury ...	... Do.	...A. Scott Purves, M.D.
	Shilbottle ...	... Do.	...B. W. E. Trevor-Roper, M.R.C.S., L.R.C.P., M.B., CH.B.
	Warkworth ...	...Amble U.D. Alnwick R.D.	...L. V. McNabb, M.B., B.S.
North No. 1	West ...	...Belford R.D.	...J. McDonald, M.D.
	East ...	... Do.	...F. B. Macaskie, L.R.C.P., L.R.C.S. L.R.F.P.S.
West ...	...Bellingham No. 1	...Bellingham R.D.	...M. K. Dunlop, M.B., CH.B.
	Do. No. 2	... Do.	... Do.
	Do. No. 3	... Do.	...G. W. L. Kirk, M.B., CH.B.
	Do. No. 4	... Do.	... Do.
	Do. No. 5	... Do.	...Wm. Murdie, M.B., CH.B.
	Do. No. 6	... Do.	...Jos. Goodall, M.B., CH.B.
North No. 1	Berwick ...	...Berwick Borough	*W. R. Sprunt, M.B., CH.B.
	Norhamshire ...	...Norham & Islandshires R.D.	...Jas. McWhir, M.B., CH.B.
	Islandshire ...	... Do.	...John Elliott, L.R.C.P., L.R.C.S. L.R.F.P.S.
South...	...Gosforth ...	...Gosforth U.D.	...J. M. Gover, M.B., B.S.
West ...	...Lemington ...	...Newburn U.D. (part of)	...H. C. Coxon, M.D.
	Newburn ...	... Do.	...G. B. Picton, M.B., B.S.
Central	...Ponteland ...	...Castle Ward R.D. (part of)	*Willmot Holmes, M.R.C.S., L.R.C.P.
	Stamfordham...	... Do.	...W. B. Allan, M.B., B.S.
	Stannington ...	... Do.	...R. H. Newman, L.R.C.P.I. & L.M., L.R.C.S.I.
North No. 1	Carham ...	...Glendale R.D.	...F. Henderson, M.D.
	Chatton ...	... Do.	*A. Dey, M.B., C.M.
	Ford ...	... Do.	...V. E. Badeock (M.C.), M.D.
	Glendale Southern	... Do.	...B. W. E. Trevor-Roper, M.R.C.S., L.R.C.P., M.B., CH.B.
	Lowick ...	... Do.	...John Elliott, L.R.C.P., L.R.C.S. L.R.F.P.S.
	Wooler ...	... Do.	...A. Dey, M.B., C.M.
West ...	...Haltwhistle Eastern	...Haltwhistle R.D.	*E. H. Jaques, M.B., B.S.
	Do. Western...	Do.	...J. M. Glasse, M.B., CH.B.
	Do. Southern	Do.	...W. S. Dalgetty, M.B., CH.B.
	Whitfield ...	... Do.	...(Vacant). Dr. S. K. Vines act when required.
	Hexham ...	...Hexham U.D. Hexham R.D.	*W. M. Stewart, M.B., CH.B.

* Also acts as Medical Officer for the Poor Law Institution.

Guardians' Committee.	District.	County Area.	Medical Officer.
West—contd.	Slaley ...	...Hexham R.D.	...W. M. Stewart, M.B., CH.B.
	Shotley ...	...Do.	...J. Murray, M.B., CH.B., B.A.O., R.U.I.
	Blanchland ...	...Do.	...K. M. MacDonald, M.B., CH.B.
	Humshaugh ...	...Do.	...Monica F. Bell, M.B., B.S.
	Haydon ...	...Do.	...H. D. N. Miller, M.B., CH.B., M.R.C.S., L.R.C.P., B.A.
	Allendale ...	...Do.	...S. K. Vines, L.R.C.P., L.M.R.C.P.I., L.S.A., L.M.S.S.A.
	Wylam ...	...Prudhoe U.D.	G. McCoull, M.B., B.S., L.R.C.P., L.R.C.S., L.R.F.P.S.
		Hexham R.D.	
	Ovingham ...	...Prudhoe U.D.	Do.
		Hexham R.D.	Do.
	Corbridge ...	...Do.	...D. N. Jackson (M.B.E.), M.B., B.S.
	Allenheads ...	...Do.	...S. K. Vines, L.R.C.P., L.M.R.C.P.I., L.S.A., L.M.S.S.A.
	Ninebanks ...	...Do.	...Do.
Central	...Morpeth No. 1	...Morpeth Borough	*Hugh Dickie, M.B., CH.B.
	Do. No. 2	...Morpeth R.D.	...R. L. Dagger, M.D., M.R.C.S., L.R.C.P.
	Do. No. 2A	...Ashington U.D.	M. Bruce, M.B., C.M.
		Morpeth R.D.	
	Do. No. 3	...Bedlington U.D.	W. Hudson, M.D., B.H.Y., D.P.H.
		Morpeth R.D.	
	Do. No. 4	...Morpeth R.D.	...R. A. Welsh, M.B., B.S.
	Do. No. 5	...Do.	...J. P. Philip (O.B.E.), M.D., D.P.H.
	Do. No. 6	...Ashington U.D.	...G. R. Spence, M.B., CH.B.
		(Hirst Ward)	
	Do. No. 6A	...Newbiggin U.D.	...H. S. Brown, M.D., L.M.S.A.
		Morpeth R.D.	Do.
	Do. No. 7	...Do.	...Dr. Dickie acts when required.
	Do. No. 8	...Do.	...Hugh Dickie, M.B., CH.B.
	Do. No. 9	...Do.	...Dr. Dickie acts when required.
North	No. 2 Rothbury East	...Rothbury R.D.	*A. S. Hedley, M.B., B.S.
		Rothbury U.D.	Do.
	Rothbury West	...Rothbury U.D.	...J. A. Smail, M.B., CH.B.
		and R.D.	
	Rothley ...	...Rothbury R.D.	...A. S. Hedley, M.B., B.S.
	Harbottle ...	...Rothbury R.D.	...G. H. Bedford, L.M.S.S.A.
	Elsdon... ...	...Do.	...Do.
	Whittingham...	...Rothbury R.D.	...A. Patterson, M.B.
Central	...Blyth ...	...Blyth Borough	...T. Gallacher, L.R.C.P., L.R.C.S., L.R.F.P.S.
South...	...Whitley ...	...Whitley & Monk-seaton U.D.	J. G. Nicholson, M.B., CH.B., M.A.
	Seaton Delaval	...Seaton Delaval U.D.	Geo. Hall, M.B., B.S.
	(Excluding the Old Parish of Hartley).		
	Seghill... ...	...Seghill U.D.	...P. Henderson, M.D., L.R.C.P., L.R.C.S., L.R.F.P.S.
	Cramlington ...	...Cramlington U.D.	...T. G. Quinn, M.B., CH.B.
	Earsdon ...	...Earsdon U.D.	...R. J. E. Christie, M.B., CH.B., B.A.O.
		(Including the Old Parish of Hartley).	
	North Longbenton	...Longbenton U.D.	...S. Fullerton, M.B., CH.B., B.A.O.
	Weetslade ...	...Weetslade U.D.	...T. Craig, M.B., CH.B.
	Wallsend ...	...Wallsend Borough	H. H. Aitchison, M.B., L.R.C.P., L.R.C.S.
		(Part of)	
	Willington Quay ...	...Do.	...L. Craig, L.R.C.P., L.R.C.S., L.R.F.P.S.

* Also acts as Medical Officer for the Poor Law Institution.

PUBLIC VACCINATORS.

- H. H. Aitchison, M.B. (Ed.),
L.R.C.P., L.R.C.S.
- W. Holmes, M.R.C.S., L.R.C.P.
- V. E. Badeock (M.C.), M.D. (Durh.).
- G. H. Bedford, L.M.S.S.A. (Lond.).
- M. F. Bell, M.B., B.S. (Durh.).
- H. S. Brown, M.D. (Durh.), L.M.S.S.A.
(Lond.).
- P. W. MacLagan (M.C.), M.D. (Edin.).
- R. J. E. Christie, M.B., CH.B.,
B.A.O. (Belf.).
- H. C. Coxon, M.D. (Durh.).
- L. Craig, L.R.C.P., L.R.C.S. (Ed.),
L.R.F.P.S. (Glas.).
- T. Craig, M.B., CH.B. (Ed.).
- R. L. Dagger, M.D. (Durh.), M.R.C.S.
(Eng.), L.R.C.P. (Lond.).
- *A. Dey (M.B.E.), M.B., C.M. (Aberd.).
- *H. Dickie, M.B., CH.B. (Glas.).
- M. K. Dunlop, M.B., CH.B. (Glas.).
- J. Elliott, L.R.C.P., L.R.C.S. (Ed.),
L.R.F.P.S. (Glas.).
- F. J. Fell, L.R.C.P. & S. (Ed.),
L.R.F.P. & S. (Glas.).
- S. Fullerton, M.B., B.CH., B.A.O.
(Belf.).
- W. Galbraith, L.R.C.P., L.R.C.S. (Ed.).
- T. Gallacher, L.R.C.P., L.R.C.S. (Ed.),
L.R.F.P.S. (Glas.).
- J. M. Glasse, M.B., CH.B. (Edin.).
- J. Goodall, M.B., CH.B. (Leeds).
- G. Hall, M.B., B.S. (Durh.).
- *A. S. Hedley, M.B., B.S. (Durh.).
- F. Henderson, (M.C.), M.B., CH.B.
- P. Henderson, M.D. (Durh.), L.R.C.P.,
L.R.C.S. (Ed.), L.R.F.P.S. (Glas.).
- *W. Holmes, M.R.C.S. (Eng.), L.R.C.P.
(Lond.).
- W. Hudson, M.D., B.H.Y., D.P.H.
- D. N. Jackson (M.B.E.), M.B., B.S.
(Durh.).
- *E. H. Jaques, M.B., B.S. (Durh.).
- H. R. Kendal, M.B. (Durh.).
- G. W. L. Kirk, M.B., CH.B. (Leeds)
- F. B. Macaskie, L.R.C.P., L.R.C.S.
(Ed.), L.R.F.P.S. (Glas.).
- G. McCoull, M.B., B.S. (Durh.),
L.R.C.P., L.R.C.S. (Ed.),
L.R.F.P.S. (Glas.).
- J. McDonald, M.D. (Ed.).
- K. M. MacDonald, M.B., CH.B. (Glas.).
- *J. A. McLeod, M.B., CH.B. (Ed.),
D.P.H. (Ed. and Glas.).
- L. V. McNabb, M.B., B.S. (Durh.).
- J. McWhir, M.B., CH.B. (Glas.).
- H. D. N. Miller, M.B., CH.B., M.R.C.S.
(Eng.), L.R.C.P. (Lond.), B.A.
- W. Murdie, M.B., CH.B. (Ed.), M.A.
- J. Murray, M.B., CH.B., B.A.O.,
R.U.I. (Cath. Un. Dub.).
- R. H. Newman, L.R.C.P.I. & L.M.,
L.R.C.S.I.
- J. G. Nicholson, M.B., CH.B. (Ed.),
M.A.
- A. Patterson, M.B. (Durh.).
- J. P. Philip (O.B.E.), M.D. (Aberd.),
D.P.H.
- G. B. Picton, M.B., B.S. (Durh.).
- T. G. Quinn, M.B., CH.B. (St. And.).
- A. Scott Purves, M.D. (Ed.).
- J. A. Smail, M.B., CH.B. (Ed.).
- G. R. Spence, M.B., CH.B. (Glas.).
- *W. M. Stewart, M.B., CH.B. (Glas.).
- W. S. Dalgetty, M.B., CH.B.
- B. W. E. Trevor-Roper, M.R.C.S.,
L.R.C.P. (Lond.), M.B., CH.B. (Vict.
Manch.).
- S. K. Vines, L.R.C.P. (Ed.), L.M.R.
C.P.I., L.S.A., L.M.S.S.A.
- R. A. Welsh, M.B., B.S. (Durh.).

* Also acts as Public Vaccinator for Poor Law Institution.

LIST OF VACCINATION OFFICERS.

Vaccination District.					Vaccination Officer.
Alnwick	...	...	...	...	N. A. Burke.
Embleton	...	...	...	...	A. Welsh.
Warkworth	...	...	...	...	G. S. Smetham.
Belford ...	...	...	...	...	C. V. F. Cooke.
Bellingham	...	...	...	...	John R. Colling.
Berwick	...	...	...	...	John Smith.
Stamfordham	...	...	...	...	R. J. Harrison.
Ponteland	...	...	...	...	R. Reay.
Glendale	...	...	...	...	G. Carr.
Hexham	...	...	...	...	M. Atkin.
Allendale	...	...	...	...	T. A. Henderson.
Chollerton	...	...	...	...	J. Muir.
Bywell ...	...	...	...	...	W. J. Richardson.
Haltwhistle	...	...	...	...	Frank Smith.
Ashington	...	...	...	...	F. Darling.
Bedlington	...	...	...	...	R. Dickinson.
Morpeth	...	...	...	...	E. Stanley.
Rothbury	...	...	...	...	E. Heatley.
Blyth ...	...	...	...	...	John Thompson.
Cramlington	...	...	...	...	R. N. Carr.
Earsdon	...	...	...	...	R. Gibson.
Longbenton	...	...	...	...	F. Robertson.
Wallsend	...	...	...	...	J. W. Stoker.

PUBLIC HEALTH LEGISLATION.

The following are the principal Acts of administrative interest which became law in 1933 :—

The Housing (Financial Provisions) Act, 1933, terminates the power of the Minister of Health to grant subsidies and enables him to undertake to make contributions towards losses sustained by Local Authorities in connection with houses to be let to the working classes.

The Blind Voters Act, 1933, amends the Ballot Act, 1872, so as to enable a blind voter, at a poll, to have the assistance of a relative or friend.

The Slaughter of Animals Act, 1933, provides for the humane and scientific slaughtering of animals.

ORDERS, CIRCULARS, ETC.

The undermentioned are the principal Orders made, and Circulars and Memoranda issued during the year, which are of administrative interest to County Councils :—

Port Sanitary Regs., 1933.—These Regs. replace the general and special Cholera, Yellow Fever and Plague Regs., 1907, the Port Sanitary Authorities (Infectious Diseases) Regs., 1920, and the Public Health (Deratisation of Ships) Regs., 1929, and include provisions for carrying out obligations under the International Sanitary Convention of Paris, 1926.

The Town and Country Planning (General Transitional) Order, 1933.

The Town and Country Planning Regs., 1933, the Town and Country Planning (General Interior Development) Order, 1933, and Memoranda T. and C.P. 1, 2 and 3 relate to the operation of the Town and Country Planning Act, 1932.

The Housing Consolidated Amendment Regs., 1932, amend the Housing Consolidated Regs., 1925, made under the Housing Act, 1925.

The Local Government (Qualifications of Medical Officers and Health Visitors) (Amendment) Regs., 1933, make arrangements for ensuring a uniform training and certification of Health Visitors in this country and in Scotland.

Memorandum 171 Med. indicates precautions to be taken against antimony poisoning when using enamelled hollow-ware vessels for the preparation or storage of food or drink.

A Memorandum on The Housing Act, 1930, makes available to local authorities the services of Valuation Officers in connection with the work of dealing with unhealthy areas.

Circular No. 1296 explains the operation of the Port Sanitary Regs., 1933.

Circular No. 1305 (and summary) deal with the working of the Town and Country Planning Act, 1932.

Circular No. 1331 urges the adoption of speedier measures to bring the slum evil to an end.

Circular No. 1334 deals with the operation of the Housing (Financial Provisions) Act, 1933.

Circular No. 1335 draws attention to the application of Circular No 1334, above-mentioned, to Rural Housing.

Circular No. 1336 relates to the Local Government (Qualifications of Medical Officers and Health Visitors) (Amendment) Regs., 1933.

Circulars Nos. 1337 and 1337A suggest measures to be adopted for the prevention, during early childhood, of deafness and deaf mutism, and for bringing more deaf and dumb persons into employment.

Circular No. 1338 urges the necessity for ensuring adequate water supplies in rural districts.

Circular No. 1345 and appendix indicate that the Minister of Health will recognise as evidence that meat was free from disease at time of slaughter, official certificates issued under the P.H. (Imported Food) Regs., 1925, and the P.H. (Imported Food) Amendment Regs., 1933.

Circular No. 1349 explains the operation of the Slaughter of Animals Act, 1933.

Circular No. 1353 relates to revised arrangements made in connection with the Certification of Blindness.

Circular No. 1356 draws attention to the advisability of reciprocal arrangements existing between local authorities of adjoining districts with regard to ambulance services.

Circular No. 1365 relates to certain changes in arrangements for the residential treatment of tuberculous ex-servicemen chargeable to the Ministry of Pensions.

Circular No. 1365A indicates that after January 1st, 1934, certain certificates relating to the non-residential treatment of tuberculous ex-servicemen will not be required by the Minister of Pensions from the Tuberculosis Officer.

Circular No. 1368 provides for the exclusion (from an annual Return) of patients, whose stay in residential institutions does not exceed 28 days.

MINISTRY OF HEALTH INQUIRIES.

Ministry of Health Inquiries were held during the year, as shown below :—

January 25th, at Rothbury. Relative to an application by the Rothbury Urban District Council for sanction to borrow £1.040 for works of water supply extension at Rothbury.

April 26th, at Whalton. Relative to an application by the Castle Ward Rural District Council for sanction to borrow £1,200 for works of sewerage and sewage disposal for the contributory place of Whalton.

June 28th, at Seahouses. Relative to an application by the Rural District Council of Belford for sanction to borrow the sum of £9,000 for works of water supply to the contributory places of Beadnell, Chathill, Elford, Ellingham, Fleetham, North Sunderland, Shoreston and Swinhoe.

August 29th, at Shilbottle Grange. Relative to an application by the Rural District Council of Alnwick for sanction to borrow the sum of £1,350 for works of sewerage and sewage disposal for the contributory place of Shilbottle.

August 30th, at Blyth. Relative to an application by the Municipal Corporation of Blyth for sanction to borrow £2,600 for linking up works of water supply.

I am, my Lords, Ladies and Gentlemen,

Your obedient servant,

WILLIAM F. J. WHITLEY.

THE ADMINISTRATIVE COUNTY.

AREA.

The area of the County is 1,279,153 acres, divided as follows:—Boroughs, 14,467 acres; urban districts, 60,209 acres; rural districts, 1,204,477 acres.

POPULATION.

The *civil* population of Northumberland (exclusive of the county boroughs of Newcastle-on-Tyne and Tynemouth) was estimated by the Registrar-General to be 410,200 in the middle of 1933. The population at the 1931 Census was 408,704.

RATEABLE VALUE.

Rateable value of administrative county, as at April 1st, 1933, £1,907,526. Produce of a 1d. rate for year ended March 31st, 1934 (estimated), £7,366.

CHANGES IN AREA.

No alteration in the area of sanitary districts or of the administrative county was made during the year under review.

BOROUGH, URBAN AND RURAL DISTRICTS, AND PORT SANITARY AUTHORITIES.

The County at the *end* of 1933 was divided for the purpose of sanitary administration into 31 districts, four of which were municipal boroughs, seventeen urban districts, and ten rural districts. There are also the Blyth and Tyne Port Sanitary Authorities. The Authorities for the Tweed and Coquet Ports are the Council of the Borough of Berwick-on-Tweed and the Amble Urban District Council respectively.

BOROUGH.

Berwick-on-Tweed, Blyth, Morpeth and Wallsend.

The civil population of the boroughs was estimated to be 96,789 in the middle of 1933.

URBAN DISTRICTS.

Alnwick, Amble, Ashington, Bedlingtonshire, Cramlington, Earsdon, Gosforth, Hexham, Longbenton, Newbiggin-by-the-Sea, Newburn, Prudhoe, Rothbury, Seaton Delaval, Seghill, Weetslade, and Whitley & Monk-seaton.

The civil population of the urban districts was estimated to be 211,111 in the middle of 1933.

RURAL DISTRICTS.

Alnwick, Belford, Bellingham, Castle Ward, Glendale, Haltwhistle, Hexham, Morpeth, Norham & Islandshires, and Rothbury.

The civil population of the rural districts was estimated to be 102,300 in the middle of 1933.

The area and population of each sanitary district in the administrative county will be found in a table opposite page 24 of this report.

BIRTHS.

Live Births.—According to the statistics supplied by the Registrar-General the net births belonging to the administrative county numbered 6,326—3,296 males and 3,030 females (4,923 of the births occurred in urban districts and 1,403 in rural districts).

Of the 6,326 births above-mentioned 284 (4.5%) were illegitimate.

The birth rate for the county was 15.42 (15.94 in 1932 and 16.66 in 1931).

The following table shows the comparative rates :—

	Birth rate.	Increase since 1932.	Decrease since 1932.	Mean rate 1923-1932.
Administrative County ...	15.42	—	0.52	18.84
Urban districts ...	15.99	—	0.68	19.88
Rural districts ...	13.71	—	0.04	15.80
England and Wales ...	14.4	—	0.9	17.15

Still-births.—The net still-births stated by the Registrar-General to have been registered as belonging to the administrative county during the year 1933 numbered 252—122 males and 130 females (206 belonged to urban districts and 46 to rural districts). Sixteen, representing 6.3% of the 252 still-births, were illegitimate.

Comparative rates, per 1,000 of the population, and per 1,000 of the total births registered are given in the following table :—

	Number.	Rate per 1,000 population.	Rate per 1,000 total births registered.
Administrative County ...	252	0.61	39.8
Urban Districts ...	206	0.67	41.8
Rural Districts ...	46	0.45	32.7

Particulars of live births and still-births as regards each sanitary district in the administrative county are shown in a table opposite page 24 of this report.

DEATHS.

Net deaths.—According to information supplied by the Registrar-General the net deaths numbered 4,893—2,553 males and 2,340 females (3,680 in urban and 1,213 in rural districts).

CAUSES OF DEATH AT VARIOUS AGE PERIODS IN THE ADMINISTRATIVE COUNTY DURING 1933.

CAUSES OF DEATH AT VARIOUS AGE PERIODS IN THE ADMINISTRATIVE COUNTY DURING 1933.

CAUSES OF DEATH.			AGGREGATE OF URBAN DISTRICTS.										AGGREGATE OF RURAL DISTRICTS.														
			All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	Total.
	ALL CAUSES	M. F.	1954 1726	218 156	56 40	35 32	55 48	90 73	113 103	102 115	178 170	324 262	425 355	358 372	599 614	43 35	5 4	2 8	16 10	25 19	29 18	24 27	63 56	77 92	151 163	164 182	2,553 2,340
1	Typhoid and para-typhoid fevers.	M. F.	2 2	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2 3
2	Measles	M. F.	8 14	1 3	5 8	2 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8 14
3	Scarlet fever	M. F.	7 7	...	2 ...	1 1	3 4	1	1	...	...	...	...	...	3 2	...	...	...	1 2	...	...	...	...	...	...	...	10 9
4	Whooping cough...	M. F.	7 5	3 2	3 2	1 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7 5
5	Diphtheria	M. F.	4 ...	...	1 ...	2 ...	1 ...	...	...	...	...	...	...	...	1 1	1 ...	...	...	1 ...	...	...	...	...	...	...	...	5 1
6	Influenza	M. F.	63 64	5 1	2 1	2 3	...	3 4	3 6	5 5	10 10	14 7	11 12	8 14	32 26	3 ...	1 1	...	2 1	1 1	...	...	3 1	4 2	6 5	9 11	95 90
7	Encephalitis lethargica	M. F.	3 7	...	...	...	...	...	1	...	...	1 2	...	...	1 2	...	...	...	...	...	...	...	...	...	...	...	4
8	Cerebro-spinal fever	M. F.	10 8	1 1	2 1	...	1 3	...	2	...	...	...	...	...	1 1	...	...	...	...	...	...	...	...	...	...	...	11 9
9	Tuberculosis of respiratory system	M. F.	112 105	1 ...	2 ...	...	5 6	27 27	29 32	25 25	12 6	11 8	...	...	25 26	...	...	...	...	2 8	...	...	...	...	...	...	137 131
10	Other tuberculous diseases	M. F.	31 27	6 ...	...	4 5	3 4	9 8	4 4	2 3	1 ...	1 ...	...	...	11 12	...	...	...	1 1	...	...	...	...	...	...	...	42 39
11	Syphilis	M. F.	7 2	2 ...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7 2
12	General paralysis of the insane, tabes dorsalis	M. F.	12 6	...	...	...	...	...	...	...	...	...	...	...	3 ...	...	...	...	...	...	...	...	...	...	...	...	15 6
13	Cancer, malignant disease	M. F.	185 240	...	...	...	...	...	...	...	...	...	...	...	60 95	...	...	...	...	...	...	...	...	...	...	...	245 335
14	Diabetes	M. F.	21 34	1 ...	...	...	...	...	...	...	...	...	...	...	5 8	...	...	...	...	...	...	...	...	...	...	...	26 42
15	Cerebral hemorrhage, &c.	M. F.	116 110	...	...	...	...	...	...	...	...	...	...	...	21 49	...	...	...	...	...	...	...	...	...	...	...	137 159
16	Heart disease	M. F.	368 320	...	...	...	...	...	...	...	...	...	...	...	108 126	...	...	...	...	...	...	...	...	...	...	...	476 446
17	Aneurysm	M. F.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3 1
18	Other circulatory diseases	M. F.	113 81	...	...	...	...	...	...	...	...	...	...	...	42 31	...	...	...	...	...	...	...	...	...	...	...	155 112
19	Bronchitis...	M. F.	63 49	11 11	3 2	...	...	...	...	...	...	...	...	...	14 13	...	...	...	...	...	...	...	...	...	...	...	77 62
20	Pneumonia (all forms)	M. F.	109 99	26 33	14 14	12 10	9 3	3 2	3 3	4 7	13 7	10 3	7 14	8 3	23 14	2 2	...	...	...	2 ...	...	...	...	...	...	...	132 113
21	Other respiratory diseases	M. F.	24 17	...	2 ...	...	...	...	...	...	...	...	...	...	14 3	...	...	...	...	...	...	...	...	...	...	...	38 20
22	Peptic ulcer	M. F.	21 7	...	...	...	...	...	...	...	...	...	...	...	2 2	...	...	...	...	...	...	...	...	...	...	...	23 9
23	Diarrhoea, &c.	M. F.	50 39	30 18	6 4	...	3 4	...	...	...	...	...	...	...	5 6	3 2	...	...	...	...	...	...	...	...	...	...	55 45
24	Appendicitis	M. F.	9 7	...	...	...	...	...	...	...	...	...	...	...	7 1	...	...	...	...	...	...	...	...	...	...	...	16 8
25	Cirrhosis of liver...	M. F.	4 3	...	...	...	...	...	...	...	...	...	...	...	2 ...	...	...	...	...	...	...	...	...	...	...	...	6 3
26	Other diseases of liver, etc.	M. F.	3 14	...	...	...	...	...	...	...	...	...	...	...	1 4	...	...	...	...	...	...	...	...	...	...	...	4 18
27	Other digestive diseases	M. F.	29 26	2 2	2 1	...	...	...	...	...	...	...	...	...	10 6	...	...	...	...	...	...	...	...	...	...	...	39 32
28	Acute and chronic nephritis	M. F.	64 65	...	...	...	...	...	...	...	...	...	...	...	36 33	...	...	...	...	...	...	...	...	...	...	...	100 98
29	Puerperal sepsis	F.	15	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	20
30	Other puerperal causes	F.	18	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...
31	Congenital debility, premature birth, malformations, etc.	M. F.	107 73	...	...	...	...	...	...	...	...	...	...	...	28 21	...	...	...	...	...	...	...	...	...	...	...	135 94
32	Senility	M. F.	73 77	...	...	...	...	...	...	...	...	...	...	...	27 35	...	...	...	...	...	...	...	...	...	...	...	100 112
33	Suicide	M. F.	26 7	...	...	...	...	...	...	...	...	...	...	...	3 4	...	...	...	...	...	...	...	...	...	...	...	29 11
34	Other Violences	M. F.	98 36	3 3	2 3	7 1	3 7	16 1	19 2	11 5	13 3	11 4	7 6	6 11	37 11	2 2	...	...	...	...	...	...	...	...	...	...	135 47
35	Other defined diseases	M. F.	180 127	19 9	8 1	3 3	11 5	15 7	14 10	6 11	14 13	30 25	30 18	30 60	62 60	5 6	...	...	...	...	...	...	...	...	...	...	242 187
36	Causes ill-defined or unknown	M. F.	22 15	1 ...	...	...	...	...	...	...	...	...	...	...	15 11	...	...	...	...	...	...	...	...	...	...	...	37 26

SPECIAL CAUSES INCLUDED IN NO. 35 ABOVE.

The following table shows the comparative rates :—

	Death rate.	Increase since 1932.	Decrease since 1932.	Mean rate 1923-1932.
Administrative County ...	11·93	0·60	—	11·61
Urban districts ...	11·95	0·69	—	11·75
Rural districts ...	11·86	0·29	—	11·21
England and Wales ...	12·3	0·3	—	12·08

Details of the deaths and death rates in the several districts are given in the table opposite page 24 of this report.

The diseases causing the greatest mortality in the administrative county during 1933 were as follows :—

Disease.	No. of deaths.	Percentage of total deaths.
Heart Disease ...	922	18·84
Cancer ...	580	11·85
Tuberculosis ...	349	7·13
Cerebral Hæmorrhage, etc. ...	296	6·05
Other circulatory diseases ..	267	5·45
Pneumonia (all forms) ...	245	5·01
Acute and Chronic Nephritis ...	198	4·05
Totals ...	2,857	58·38

The above-named seven diseases were responsible for more than half the deaths in the administrative county.

INFANT MORTALITY.

	Number of deaths.	Death rate per 1000 births	Increase since 1932.	Decrease since 1932.	Mean rate 1923-1932.
Administrative County ...	452	71	4	—	76
Urban districts ...	374	76	9	—	79
Rural districts ...	78	56	—	9	61
England and Wales ...	36,760	64	—	1	69

The subjoined tables indicate the rates among legitimate and illegitimate infants respectively :—

	Legitimate Infants.		Illegitimate Infants.	
	No. of deaths under 1 year.	Death rate per 1000 births.	No. of deaths under 1 year.	Death rate per 1000 births.
Administrative County ...	430	71	22	76
Urban districts ...	357	76	17	81
Rural districts ...	73	55	5	70

DEATHS UNDER 5 YEARS AND AT 65 YEARS AND UPWARDS.

The rates (per 1,000 population) were as follows :—

			Under 5 years.	65 years and upwards.
Administrative County	...	...	1.55	5.29
Urban districts	...	...	1.74	4.90
Rural districts	...	...	0.95	5.47

INFECTIOUS DISEASES.

Notifications of Infectious Diseases received during the year 1933, under Article 14 (2) of the Sanitary Officers Order, 1926.

Sanitary districts.	Small-pox.	Scarlet Fever.	Diphtheria.	† Enteric Fever.	Pneumonia.	Puerperal Fever.	Puerperal Pyrexia.	Ophthalmia Neonatorum.	Erysipelas.	Encephalitis Lethargica.	Acute Polio myelitis.	Acute Polio-encephalitis.	Cerebro-Spinal Fever.	Totals.
MUNICIPAL BOROUGHs—														
Berwick-on-Tweed	—	53	1	—	6	1	—	—	5	—	—	—	—	66
Blyth	—	312	8	8	155	—	4	2	20	—	—	—	4	513
Morpeth	—	7	—	—	18	—	—	—	5	—	—	—	—	30
Wallsend	—	466	11	—	137	1	4	1	31	—	—	—	5	656
URBAN DISTRICTS—														
Alnwick	—	57	—	—	—	1	—	—	1	—	—	—	—	59
Amble	—	41	—	—	—	—	—	—	4	—	—	—	—	45
Ashington	—	273	14	53	34	4	8	4	16	—	—	—	5	411
Bedlingtonshire	—	293	17	4	109	1	2	—	14	—	—	—	7	447
Cramlington	—	88	1	—	7	—	1	—	3	—	—	—	—	100
Earsdon	—	51	11	1	6	—	—	—	1	—	—	—	—	70
Gosforth	—	42	6	2	17	1	—	—	8	—	—	—	1	77
Hexham	—	10	2	1	38	—	—	—	4	—	—	1	—	56
Longbenton	—	58	7	2	43	—	4	3	5	—	—	—	—	122
Newbiggin	—	13	4	—	26	—	—	1	7	—	—	—	1	52
Newburn	—	46	1	3	29	—	2	1	11	—	—	—	2	95
Prudhoe	—	81	4	4	20	—	—	3	11	—	—	—	1	124
Rothbury	—	5	—	—	1	—	—	—	3	—	—	—	—	9
Seaton Delaval	—	30	3	—	36	—	—	—	5	—	—	—	—	74
Seghill	—	9	1	—	16	—	—	—	3	—	—	—	—	29
Weetslade	—	46	—	—	8	—	2	1	3	—	—	—	1	61
Whitley & Monkseaton	—	113	11	1	31	1	1	—	12	—	—	—	1	171
RURAL DISTRICTS—														
Alnwick	—	27	4	1	7	—	—	—	1	—	—	—	—	40
Belford	—	3	—	—	4	—	—	—	4	—	—	—	—	11
Bellingham	—	19	—	—	*8	—	—	1	3	—	—	—	—	31
Castle Ward	—	32	34	—	14	—	—	1	7	—	—	—	1	89
Glendale	—	46	—	1	11	1	—	—	6	1	—	—	—	66
Haltwhistle	—	10	1	1	6	—	—	—	1	—	—	—	—	19
Hexham	—	28	1	5	42	—	4	—	4	—	—	—	—	84
Morpeth	—	149	6	16	30	3	—	—	14	—	—	—	1	219
Norham & Islandshires	—	11	—	1	2	—	—	—	4	—	—	—	—	18
Rothbury	—	5	—	—	4	—	—	—	8	—	—	—	—	17
Totals	Nil	2424	148	104	865	14	32	18	224	1	Nil.	1	30	3861

† Includes Typhoid and Paratyphoid.

* Includes two Non-civilian cases.

The attack rate per 1,000 population for the administrative county was 9.4, for boroughs and urban districts 10.61, and for rural districts 5.81.

The following are the attack rates, per 1,000 population, of the under-mentioned infectious diseases, in each sanitary district in the administrative county :—

Sanitary Districts.	Small-pox	Scarlet Fever.	Diphtheria.	Enteric Fever.*	Puerperal Fever.	Puerperal Pyrexia	Erysipelas.
<i>Municipal Boroughs.</i>							
Berwick ...	—	4.33	0.08	—	0.08	—	0.41
Blyth ...	—	9.40	0.24	0.24	—	0.12	0.60
Morpeth ...	—	0.93	—	—	—	—	0.66
Wallsend ...	—	10.60	0.25	—	0.02	0.09	0.72
<i>Urban Districts.</i>							
Alnwick ...	—	8.17	—	—	0.14	—	0.14
Amble ...	—	9.68	—	—	—	—	0.95
Ashington ...	—	9.17	0.47	1.78	0.14	0.27	0.54
Bedlingtonshire ...	—	10.65	0.62	0.15	0.03	0.07	0.51
Cramlington ...	—	10.83	0.12	—	—	0.12	0.37
Earsdon ...	—	3.91	0.84	0.08	—	—	0.08
Gosforth ...	—	2.29	0.33	0.11	0.05	—	0.43
Hexham ...	—	1.13	0.23	0.11	—	—	0.45
Longbenton ...	—	3.96	0.48	0.13	—	0.27	0.34
Newbiggin ...	—	1.87	0.57	—	—	—	1.01
Newburn ...	—	2.34	0.05	0.15	—	0.10	0.56
Prudhoe ...	—	8.88	0.44	0.44	—	—	1.21
Rothbury ...	—	4.00	—	—	—	—	2.36
Seaton Delaval ...	—	4.09	0.41	—	—	—	0.68
Seghill... ...	—	3.35	0.37	—	—	—	1.12
Weetslade ...	—	5.96	—	—	—	0.26	0.39
Whitley & Monkseaton	—	4.53	0.44	0.04	0.04	0.04	0.48
<i>Rural Districts.</i>							
Alnwick ...	—	2.18	0.32	0.08	—	—	0.08
Belford ...	—	0.67	—	—	—	—	0.90
Bellingham ...	—	3.63	—	—	—	—	0.57
Castle Ward ...	—	2.16	2.30	—	—	—	0.47
Glendale ...	—	5.92	—	0.13	0.13	—	0.77
Haltwhistle ...	—	1.18	0.12	0.12	—	—	0.12
Hexham ...	—	1.34	0.05	0.24	—	0.19	0.19
Morpeth ...	—	7.81	0.31	0.84	0.16	—	0.73
Norham & Islandshires	—	2.23	—	0.20	—	—	0.81
Rothbury ...	—	1.14	—	—	—	—	1.84

* Including Typhoid and Paratyphoid.

It will be observed that the highest attack rates were as follows :—

Scarlet Fever.—Cramlington, 10.83; Bedlingtonshire, 10.65, and Wallsend, 10.60.

Diphtheria.—Castle Ward, 2.30; Earsdon, 0.84, and Bedlingtonshire, 0.62.

Enteric Fever.—Ashington, 1.78; Morpeth R.D., 0.84, and Prudhoe, 0.44.

Puerperal Fever.—Morpeth R.D., 0.16; Alnwick U.D. and Ashington, 0.14 each, and Glendale, 0.13.

Puerperal Pyrexia.—Ashington and Longbenton, 0·27 each, and Weetslade, 0·26.

Erysipelas.—Rothbury U.D., 2·36; Rothbury R.D., 1·84; and Prudhoe, 1·21.

ZYMOTIC DISEASES.

The Zymotic diseases which are generally notifiable are Small-pox, Scarletina, Diphtheria, Fevers (Typhus, Typhoid and Paratyphoid and Continued & Relapsing). The seven principal Zymotic diseases upon which the Zymotic death rate is calculated, are the four just mentioned, and in addition, Whooping Cough, Measles and Diarrhoea & Enteritis (under two years).

One hundred and twenty-seven deaths were caused by the seven principal Zymotic diseases, being an increase of 22 compared with the number registered in 1932. Of these 114 took place in the urban and 13 in the rural districts.

The Zymotic diseases which caused the greatest mortality were :—

Diseases.	Number of deaths.		
	1933.	1932.	1931.
Diarrhoea & Enteritis (under 2 years)	63	41	29
Measles	22	7	82
Scarlet Fever	19	6	3

As Diarrhoea & Enteritis, Measles and Whooping Cough are not generally notifiable, no information can be given as to the number of cases which occurred.

The comparative rates for Zymotic diseases are set out in the following table :—

Diseases.	Death Rate.	Increase since 1932.	Decrease since 1932.
Administrative County	0·31	0·06	—
Urban districts	0·37	0·08	—
Rural districts	0·13	—	0·01
England and Wales	0·29	—	0·04

Table showing death rates per 1,000 living, from each of the seven principal Zymotic diseases for the seven years ended December 31st, 1933 :—

Diseases.	1927.	1928.	1929.	1930.	1931.	1932.	1933.
Small-pox	0·004	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Scarlatina	0·026	0·022	0·012	0·022	0·007	0·014	0·046
Diphtheria	0·019	0·031	0·041	0·036	0·036	0·022	0·015
Typhoid & Paratyphoid	0·016	0·014	0·046	0·014	0·014	0·007	0·012
Measles	0·074	0·029	0·107	0·029	0·201	0·017	0·053
Whooping Cough	0·033	0·093	0·288	0·034	0·083	0·095	0·029
Diarrhoea & Enteritis (under 2 years)	0·103	0·095	0·158	0·097	0·071	0·100	0·154

Small-pox.—No cases were notified.

Typhus, Cholera, Plague, Anthrax (in human subjects).—No cases were reported.

Cerebro-spinal Meningitis.—Thirty cases were notified; 20 deaths were reported.

Poliomyelitis.—No cases were notified. One death was reported.

Polio-encephalitis.—One case was notified, and one death was reported.

Chicken-pox was reported from 10 Sanitary districts.

Dysentery.—Sixteen cases were reported from 4 Sanitary districts.

Enteritis.—Nine cases were reported from one district.

Measles.—Two cases were reported from two districts (one non-civilian).

Malaria.—(Believed to have been contracted abroad), one case was reported.

Undulant Fever.—One case was reported.

Whooping Cough.—Five cases were reported, all from one district.

SCARLET FEVER.

The notifications numbered 2,424 (2,094 from urban and 330 from rural districts). The mortality from this disease was 19 (14 deaths occurring in urban and 5 in rural districts). In 1932, 6 deaths were reported, and in 1931, 3.

	Death rate per 1000 population.	Increase since 1932.	Decrease since 1932.	Attack rate per 1000 living.
Administrative County ...	0·046	0·032	—	5·91
Urban districts ...	0·045	0·036	—	6·80
Rural districts ...	0·048	0·019	—	3·22

The district in which the greatest number of cases occurred was the Borough of Wallsend (466).

TYPHOID & PARATYPHOID FEVERS.

One hundred and four cases (79 from urban and 25 from rural districts) were notified, resulting in 5 deaths (4 occurring in urban and 1 in rural districts). In 1932 the mortality was 29, and in 1931, 6.

	Death rate per 1000 population.	Increase since 1932.	Decrease since 1932.	Attack rate per 1000 living.
Administrative County ...	0·012	0·005	—	0·25
Urban districts ...	0·013	0·007	—	0·25
Rural districts ...	0·009	—	—	0·24

The district in which the greatest number of cases occurred was the urban district of Ashington (53).

DIPHTHERIA AND MEMBRANOUS CROUP.

The notifications numbered 148 (102 from urban and 46 from rural districts). The diseases (one or both) were notified from 21 districts, i.e., from all districts except the Borough of Morpeth, the urban

districts of Alnwick, Amble, Rothbury, and Weetslade, and the rural districts of Belford, Bellingham, Glendale, Norham and Islandshires, and Rothbury.

Six deaths occurred (4 in urban and 2 in rural districts); 9 deaths were reported in 1932, and 15 in 1931.

	Death rate per 1000 population.	Increase since 1932.	Decrease since 1932.	Attack rate per 1000 living.
Administrative County ..	0·015	—	0·007	0·36
Urban districts ...	0·013	—	0·012	0·33
Rural districts ...	0·019	0·010	—	0·45

MEASLES.

Twenty-two deaths occurred, all in urban districts; 7 deaths were reported in 1932 and 82 in 1931.

	Death rate per 1,000 population.	Increase since 1932.	Decrease since 1932.
Administrative County ...	0·053	0·036	—
Urban districts ...	0·071	0·049	—
Rural districts ...	—	—	—

WHOOPING COUGH.

The deaths numbered 12 (all in urban districts); 39 deaths were reported in 1932 and 34 in 1931.

	Death rate per 1,000 population.	Increase since 1932.	Decrease since 1932.
Administrative County ...	0·029	—	0·066
Urban districts ...	0·039	—	0·068
Rural districts ...	—	—	0·058

PUERPERAL FEVER.

This disease caused 20 deaths (15 in urban and 5 in rural districts), compared with 22 in 1932 and 11 in 1931.

	Death rate per 1,000 population.	Increase since 1932.	Decrease since 1932.
Administrative County ...	0·049	—	0·004
Urban districts ...	0·049	—	0·016
Rural districts ...	0·049	0·030	—

The distribution of the 20 deaths was as follows :—Berwick Borough, 1; Wallsend Borough, 4; Alnwick U.D., 1; Amble U.D., 1; Ashington U.D., 1; Bedlingtonshire U.D., 2; Cramlington U.D., 1; Gosforth U.D., 1; Longbenton U.D., 1; Newburn U.D., 1; Whitley and Monk-seaton U.D., 1; Glendale R.D., 1; Hexham R.D., 1; and Morpeth R.D., 3.

DIARRHOEA AND ENTERITIS.

At all ages.

The number of deaths at all ages was 100 (89 in urban and 11 in rural districts). In 1932 56 deaths occurred, and in 1931, 49.

	Death rate per 1,000 population.	Increase since 1932.	Decrease since 1932.
Administrative County	0·244	0·108	—
Urban districts	0·290	0·134	—
Rural districts	0·107	0·029	—

Under 2 years.

The deaths from this cause, under two years of age, numbered 63 (41 in 1932 and 29 in 1931); 58 occurred in urban and 5 in rural districts.

	Death Rate per 1,000 births.	Increase since 1932.	Decrease since 1932.
Administrative County	9·96	3·69	—
Urban districts	11·78	4·56	—
Rural districts	3·56	0·73	—

RESPIRATORY DISEASES.

Respiratory diseases (exclusive of Respiratory Tuberculosis) caused 442 deaths in the administrative county during the year; 361 occurred in urban and 81 in rural districts. 418 deaths were reported in 1932, and 604 during 1931. The following table shows the comparative rates :—

	Death Rate per 1,000 population.	Increase since 1932.	Decrease since 1932.
Administrative County	1·08	0·06	—
Urban districts	1·17	0·07	—
Rural districts	0·80	0·04	—

INFLUENZA.

One hundred and eighty-five deaths were recorded (127 in urban and 58 in rural districts), as directly attributable to this disease during the year. The deaths during 1932 numbered 70, and during 1931, 140. The following table indicates the comparative rates :—

	Death Rate per 1,000 population.	Increase since 1932.	Decrease since 1932.
Administrative County	0·45	0·28	—
Urban districts	0·38	0·24	—
Rural districts	0·57	0·32	—

Vital and Mortality Statistics.

The following table shows the principal vital and mortality rates for the years 1892-1933 (inclusive).

Year.			Birth rate per 1,000 living.	General death rate per 1,000 living.	Infant mortality rate per 1,000 births.	Zymotic death rate per 1,000 living.	Death rate from Respiratory Tuberculosis per 1,000 living.
1892	...	...	33.25	18.41	130.00	1.42	1.67
1893	...	...	33.22	18.50	160.00	2.35	1.67
1894	...	...	31.76	16.12	131.73	1.51	1.56
1895	...	...	32.59	18.72	156.28	2.29	1.62
1896	...	...	31.75	15.87	136.74	1.46	1.43
1897	...	...	31.57	16.73	150.66	1.69	1.50
1898	...	...	30.88	17.44	169.80	1.99	1.32
1899	...	...	31.46	17.71	173.88	2.29	1.27
1900	...	...	31.24	17.53	160.31	1.73	1.38
1901	...	...	33.22	18.72	183.57	2.80	1.25
1902	...	...	32.76	16.63	126.90	1.40	1.25
1903	...	...	32.58	16.81	145.43	1.58	1.19
1904	...	...	29.42	17.12	168.69	1.99	1.17
1905	...	...	30.41	15.01	133.57	1.26	1.02
1906	...	...	29.09	14.52	136.28	1.51	1.04
1907	...	...	28.25	13.51	112.93	1.03	1.00
1908	...	...	29.46	14.82	146.41	1.28	0.95
1909	...	...	28.43	13.39	106.99	1.03	1.01
1910	...	...	26.91	12.99	114.73	1.01	0.93
1911	...	...	27.48	13.96	136.79	1.94	0.98
1912	...	...	27.05	12.98	93.80	1.02	0.86
1913	...	...	26.43	13.61	111.39	1.28	0.91
1914	...	...	26.61	13.31	113.78	1.33	0.91
1915	...	...	24.42	15.82	122.00	2.04	1.03
1916	...	...	21.91	13.75	101.00	0.84	1.10
1917	...	...	20.39	13.60	101.00	0.97	1.06
1918	...	...	21.54	17.26	101.00	1.07	1.22
1919	...	...	22.14	14.11	102.00	0.92	0.97
1920	...	...	28.30	12.89	90.00	0.76	0.92
1921	...	...	25.50	12.42	95.00	1.01	0.87
1922	...	...	22.54	12.72	87.00	0.41	0.88
1923	...	...	22.56	11.33	76.00	0.74	0.85
1924	...	...	22.18	12.06	83.00	0.40	0.82
1925	...	...	20.88	11.63	82.00	0.67	0.78
1926	...	...	20.02	11.37	77.00	0.53	0.73
1927	...	...	17.90	11.53	77.00	0.27	0.81
1928	...	...	18.37	11.39	67.00	0.28	0.68
1929	...	...	16.79	12.22	81.00	0.65	0.74
1930	...	...	17.13	11.02	62.00	0.23	0.78
1931	...	...	16.66	12.24	77.00	0.41	0.75
1932	...	...	15.94	11.33	67.00	0.25	0.68
1933	...	...	15.42	11.93	71.00	0.31	0.65

TABLE OF VITAL AND MORTALITY STATISTICS, &c., 1933.

TUBERCULOSIS.

Table 1.

Deaths and death rates.

	Respiratory Tuberculosis.				Other Tuberculous diseases.				Tuberculosis (all forms).			
	Deaths.	Death rates per 100,000 living.	Increase in rates since 1932.	Decrease in rates since 1932.	Deaths.	Death rates per 100,000 living.	Increase in rates since 1932.	Decrease in rates since 1932.	Deaths.	Death rates per 100,000 living.	Increase in rates since 1932.	Decrease in rates since 1932.
Administrative County	268	65	—	3	81	20	—	3	349	85	—	6
Urban districts ...	217	70	—	3	58	19	—	3	275	89	—	6
Rural districts ...	51	50	—	4	23	22	—	4	74	72	—	7
England and Wales ...	—	69	—	—	—	13	—	2	—	82	—	2

Table I. shows the number of deaths and the death rates per 100,000 living from all forms of Tuberculosis. It will be observed that in Respiratory Tuberculosis and other Tuberculous Diseases there is a decrease of 3 per 100,000 in the Administrative County as a whole. The declension in the urban districts is similar, but in the rural districts it is 4 per 100,000.

As indicated above, the death rate from all forms of Tuberculosis in the Administrative County during 1933 was 85, being a decrease of 6 per 100,000 from the rate of last year. Of the 349 deaths, 275 occurred in boroughs and urban districts (population 307,900) equivalent to a death rate of 89 per 100,000 living persons, and 74 in rural districts (102,300) corresponding to a death rate of 72 per 100,000 living.

Table 2.

Deaths and death rates, 1900—1933.

Administrative County of Northumberland.

Year.	Respiratory Tuberculosis.		Other Tuberculous Diseases.		Tuberculosis (all forms).		Total Deaths from all causes.	% of Deaths from Tuberculosis.
	No. of Deaths.	Death rate per 100,000 living.	No. of Deaths.	Death rate per 100,000 living.	No. of Deaths.	Death rate per 100,000 living.		
*1900	537	138	244	62	781	200	6,822	11·4
*1901	495	125	280	71	775	196	7,261	10·6
*1902	498	125	240	60	738	185	6,605	11·1
*1903	485	119	323	79	808	198	6,826	11·8
*1904	490	117	317	76	807	193	7,131	11·3
1905	344	102	239	71	583	173	5,016	11·6
1906	362	104	208	60	570	164	5,026	11·3
1907	355	100	197	55	552	155	4,790	11·5
1908	344	95	220	60	564	155	5,377	10·5
1909	377	101	207	55	584	156	4,994	11·6
1910	355	93	225	60	580	153	4,917	11·7
1911	366	98	200	54	566	152	5,159	10·9
1912	328	86	193	50	521	136	4,861	10·7
1913	353	91	189	48	542	139	5,175	10·4
†1914	360	91	180	46	540	137	5,125	10·5
†1915	376	103	197	54	573	157	5,786	9·9
†1916	394	110	187	52	581	162	4,915	11·8
†1917	378	106	194	54	572	160	4,851	11·7
†1918	434	122	164	46	598	168	6,129	9·7
1919	367	97	136	36	503	133	5,335	9·4
1920	363	92	144	37	507	129	5,072	9·9
1921	347	87	151	38	498	125	4,944	10·1
1922	355	88	127	31	482	119	5,113	9·4
1923	345	85	122	30	467	115	4,599	10·1
1924	337	82	126	31	463	113	4,951	9·3
1925	324	78	123	30	447	108	4,807	9·3
1926	303	73	120	29	423	102	4,735	8·9
1927	337	81	90	22	427	103	4,812	8·9
1928	277	68	107	26	384	94	4,642	8·3
1929	301	74	108	26	409	100	5,009	8·2
1930	321	78	89	22	410	100	4,516	9·1
1931	309	75	100	25	409	100	4,993	8·2
1932	279	68	93	23	372	91	4,648	8·0
1933	268	65	81	20	349	85	4,893	7·1
Mean 1923-1932.	313	76	108	26	421	103	4,771	8·8

NOTES.—*Prior to 1905 Tynemouth U.D., Benwell and Walker were in County area.

†1914-1918 were "war" years.

‡1918 was the year of two severe epidemics of influenza.

Table 2 shows the deaths and death rates from 1900 to 1933 in the administrative County from respiratory tuberculosis, other tuberculous diseases, and all forms, with the total number of deaths from all causes and the percentage of deaths due to tuberculous diseases. It will be noted that the death rate from all forms of tuberculosis is 85 per 100,000 living persons, while in 1900 it was 200. The percentage of deaths from tuberculosis in 1900 was 11·4 against 7·1 in 1933. The total number of deaths in 1900 was 6,822, while in 1933 it was 4,893.

During the five years 1928-1932 the mean mortality rate from all forms of tuberculous disease in the administrative County was 97; from respiratory tuberculosis the mean rate was 73, and from other tuberculous diseases 24 per 100,000 living. In the preceding quinquennial period (1923-1927) the mean rates were—from tuberculosis (all forms) 108; respiratory 80, and other tuberculous diseases 28 per 100,000 persons living.

The following table shows notifications and mortality at specified age periods during the year 1933 :—

Table 3.

Age Periods.	New Cases.				Deaths.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M	F.	M.	F.	M.	F.	M.	F.
0— ...	1	...	4	1	1	...	6	1
1— ...	6	9	18	13	2	...	5	10
5— ...	43	47	43	44	5	7	6	4
15— ...	66	79	23	13	29	35	10	9
25— ...	51	48	9	8	35	37	5	8
35— ...	47	35	5	6	30	28	4	3
45— ...	29	17	3	2	19	9	3	1
55— ...	26	12	...	2	14	11	2	1
65 and upwards	2	1	...	1	2	4	1	2
	271*	248*	105*	90*	137	131	42	39

* Includes new cases coming to the knowledge of the County Medical Officer other than by formal notification under the Public Health (Tuberculosis) Regulations, 1930.

Forty-three cases (25 pulmonary and 18 non-pulmonary) were not notified prior to death. Of this number 17 died in institutions, etc., outside the administrative County. Last year 55 cases were unnotified prior to death.

ADMINISTRATION.

For convenience, the following data is given categorically in order to meet the requirements of the Ministry of Health :—

Public Health (Prevention of Tuberculosis) Regulations, 1925.—Following upon an application by the County Council, authority for enforcing these Regulations, within the area of the administrative county, was given to the County Council through the medium of the County of Buckingham (Prevention of Tuberculosis) Order, 1926. It was not found necessary to take any action under the Regulations during the year.

Public Health Act, 1925, Section 62.—No action was found to be necessary during the year.

As already indicated, the mean death rate from Respiratory Tuberculosis in the administrative County during the previous five years (1928-1932) was 73 per 100,000; this rate is greater than that recorded from all the deaths arising from the seven principal Zymotic Diseases, which showed a mean rate of 37 per 100,000 during the same period.

TABLE 4.
PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM THE 1ST JANUARY, 1933, TO THE
31ST DECEMBER, 1933, IN THE AREA OF THE COUNTY OF NORTHUMBERLAND.

Age-periods.	Formal Notifications.										Total Notifications	
	Number of Primary Notifications of new cases of Tuberculosis.											
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65 upwards.		Total (all ages).
Pulmonary (Males) ...	1	6	22	20	31	33	48	44	27	24	258	290
" (Females) ...	—	9	19	27	40	37	44	32	16	11	236	268
Non-pulmonary (Males) ...	3	15	25	15	15	6	8	4	2	—	93	100
" (Females) ...	—	11	28	16	6	7	7	5	2	1	84	93
											671	751

NOTIFICATION REGISTERS.

	Pulmonary.			Non-Pulmonary.			Total Cases.
	Males.		Total.	Males.		Total.	
	Females.						
Number of cases of Tuberculosis remaining at the 31st December, 1933, on the Registers of Notifications kept by District Medical Officers of Health in the County ...	1,672	1,523	3,195	705	625	1,330	4,525
Number of cases removed from the Registers during the year by reason <i>inter alia</i> of :—							
1. Withdrawal of notification ...	2	2	4	—	1	1	5
2. Recovery from disease ...	50	44	94	44	43	87	181
3. Death ...	119	124	243	28	26	54	297

TABLE 5.

INCIDENCE OF TUBERCULOSIS IN THE ADMINISTRATIVE COUNTY ACCORDING
TO DISTRICTS, 1933.

SANITARY DISTRICTS.	"Live" cases on Registers at com- mencement of year.			Number of Primary Notifications during year.			Deaths Registered during year.			"Live" cases on Registers at end of year.		
	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total
<i>Municipal Boroughs.</i>												
Berwick-on-Tweed ...	66	44	110	10	4	14	9	2	11	69	48	117
Blyth ...	227	72	299	46	18	64	17	3	20	260	83	343
Morpeth ...	70	13	83	11	2	13	5	3	8	73	13	86
Wallsend... ..	445	172	617	100	32	132	55	9	64	430	151	581
<i>Urban Districts.</i>												
Alnwick ...	58	11	69	9	3	12	4	1	5	66	13	79
Amble ...	13	10	23	5	...	5	2	1	3	16	10	26
Ashington ...	180	98	278	27	17	44	20	5	25	184	106	290
Bedlingtonshire ...	231	77	308	47	13	60	22	7	29	253	78	331
Cramlington ...	65	36	101	1	2	3	5	...	5	63	38	101
Earsdon ...	135	60	195	11	5	16	11	4	15	141	64	205
Gosforth ...	52	15	67	11	1	12	10	...	10	55	13	68
Hexham ...	165	27	192	10	1	11	4	...	4	169	28	197
Longbenton ...	60	14	74	21	8	29	7	8	15	67	18	85
Newbiggin-by-the-Sea ...	154	79	233	20	18	38	3	2	5	167	93	260
Newburn... ..	172	120	292	29	11	40	11	6	17	190	126	316
Prudhoe ...	44	9	53	19	3	22	6	2	8	50	15	65
Rothbury ...	1	...	1	...	1	1	...	...	...	3	1	4
Seaton Delaval ...	58	14	72	12	5	17	8	1	9	35	7	42
Seghill ...	5	2	7	...	2	2	1	...	1	5	3	8
Weetslade ...	88	71	159	5	2	7	4	...	4	89	66	155
Whitley & Monkseaton...	130	57	187	20	3	23	13	4	17	146	59	205
<i>Rural Districts.</i>												
Alnwick ...	59	26	85	11	6	17	8	3	11	66	31	97
Belford ...	9	8	17	1	1	2	4	3	7	7	6	13
Bellingham ...	28	3	31	...	...	...	2	1	3	28	3	31
Castle Ward ...	124	54	178	12	3	15	2	...	2	132	57	189
Glendale ...	18	11	29	6	1	7	6	...	6	20	12	32
Haltwhistle ...	31	5	36	...	...	...	8	3	11	30	4	34
Hexham ...	193	59	252	18	4	22	8	3	11	147	43	190
Morpeth ...	181	118	299	25	9	34	10	7	17	205	124	329
Norham & Islandshires...	22	15	37	4	1	5	2	1	3	25	14	39
Rothbury ...	3	2	5	3	1	4	1	2	3	4	3	7
TOTALS ...	3,087	1,302	4,389	494	177	671	268	81	349	3,195	1,330	4,525

TREATMENT OF TUBERCULOSIS.

The following consolidated return shows the work of all the dispensaries during the year 1933; succeeding tables give an outline of the work of individual dispensaries. It will be observed that of 1,312 new cases (including contacts) examined 388 were definitely tuberculous, 197 cases were written off the dispensaries' registers as recovered, and 186 died. At the end of the year 1,970 definite cases of tuberculosis were on the dispensaries' registers.

TUBERCULOSIS SCHEME
OF THE NORTHUMBERLAND COUNTY COUNCIL.

RETURN SHOWING THE WORK OF THE DISPENSARIES DURING THE YEAR 1933.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY				TOTAL.				GRAND TOTAL.	
	Adults.		Children.		Adults.		Children.		Adults.		Children.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts):														
(a) Definitely tuberculous ...	125	99	18	31	12	12	26	26	137	111	44	57	} 834	
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	28	21	19	17
(c) Non-tuberculous ...	...	...	...	...	...	...	...	...	111	132	87	70
B.—CONTACTS examined during the year :—														
(a) Definitely tuberculous ...	13	12	7	2	1	1	1	2	14	13	8	4	} 478	
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	1	7	2	2
(c) Non-tuberculous ...	...	...	...	...	...	...	...	...	55	100	126	146
C.—CASES written off the Dispensaries' Registers as :—														
(a) Recovered ...	51	44	23	13	2	7	39	18	53	51	62	31	} 1,057	
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensaries' Registers as tuberculous)...	...	...	...	...	...	...	...	...	175	242	222	221
		
D.—NUMBER OF CASES on Dispensaries' Registers on December 31st :—														
(a) Definitely tuberculous ...	586	507	229	231	39	43	180	155	625	550	409	386	} 2,047	
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	20	20	20	17

1. Number of cases on Dispensaries' Registers on January 1st ... 2,092
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ... 113
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ... 227
4. Cases written off during the year as Dead (all causes) ... 186
5. Number of attendances at the Dispensaries (including Contacts) 4,909
6. Number of Insured Persons under Domiciliary Treatment on the 31st December ... 344
7. Number of consultations with medical practitioners :—
 - (a) Personal ... 178
 - (b) Other ... 1,948

8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	286
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	15,644
10. Number of :—	
(a) Specimens of sputum, etc., examined... ..	967
(b) X-ray examinations made in connection with Dispensary work	599
11. Number of "Recovered" cases restored to Dispensaries' Registers, and included in A (a) and A (b) above... ..	2
12. Number of "T.B. plus" cases on Dispensaries' Registers on December 31st	366

NUMBER OF DISPENSARIES FOR THE TREATMENT OF TUBERCULOSIS
(EXCLUDING CENTRES USED ONLY FOR SPECIAL FORMS OF TREATMENT).

Provided by the Council... ..	5
Provided by Voluntary Bodies	Nil

Shelters for Domiciliary Treatment of Tuberculosis.—Portable sleeping shelters are provided and maintained by the County Council for the use of patients who are residing at home or in private houses, where the ordinary bedroom accommodation is unsuitable or prejudicial to the health of the inmates.

They are distributed on the recommendation of the Tuberculosis Officer; 52 are available, most of which were in regular use.

RETURN SHOWING THE WORK OF THE ASHINGTON DISPENSARY
DURING THE YEAR 1933.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	100	31	131
(b) Diagnosis not completed	—	—	37
(c) Non-tuberculous... ..	—	—	167
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	14	4	18
(b) Diagnosis not completed	—	—	2
(c) Non-tuberculous... ..	—	—	95
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	38	17	55
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	262
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely Tuberculous	475	169	644
(b) Diagnosis not completed	—	—	39

1. Number of cases on Dispensary Register on January 1st...	643
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	20
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	35
4. Cases written off during the year as Dead (all causes) ...	78
5. Number of attendances at the Dispensary (including contacts)...	1,517
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above...	2
7. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	93

RETURN SHOWING THE WORK OF THE BLYTH DISPENSARY
DURING THE YEAR 1933.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts):—			
(a) Definitely tuberculous ...	34	9	43
(b) Diagnosis not completed ...	—	—	13
(c) Non-tuberculous... ..	—	—	54
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous ...	6	—	6
(b) Diagnosis not completed ...	—	—	2
(c) Non-tuberculous... ..	—	—	100
C.—CASES written off the Dispensary Register as:—			
(a) Recovered	25	10	35
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	163
D.—NUMBER OF CASES on Dispensary Register on December 31st:—			
(a) Definitely tuberculous ...	232	44	276
(b) Diagnosis not completed ...	—	—	7

1. Number of cases on Dispensary Register on January 1st...	303
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	12
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	34
4. Cases written off during the year as Dead (all causes) ...	18
5. Number of attendances at the Dispensary (including contacts)...	820
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above...	—
7. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	63

RETURN SHOWING THE WORK OF THE HEXHAM DISPENSARY
DURING THE YEAR 1933.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous ...	25	9	34
(b) Diagnosis not completed ...	—	—	1
(c) Non-tuberculous... ..	—	—	69
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous ...	1	—	1
(b) Diagnosis not completed ...	—	—	—
(c) Non-tuberculous... ..	—	—	9
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	5	1	6
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	92
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	162	29	191
(b) Diagnosis not completed ...	—	—	1
1. Number of cases on Dispensary Register on January 1st... ..			212
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years			25
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"			42
4. Cases written off during the year as Dead (all causes)			19
5. Number of attendances at the Dispensary (including contacts)... ..			424
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above... ..			—
7. Number of "T.B. plus" cases on Dispensary Register on December 31st			35

RETURN SHOWING THE WORK OF THE NEWBURN DISPENSARY
DURING THE YEAR 1933.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous ...	23	9	32
(b) Diagnosis not completed ...	—	—	2
(c) Non-tuberculous... ..	—	—	17
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous ...	2	—	2
(b) Diagnosis not completed ...	—	—	—
(c) Non-tuberculous... ..	—	—	20

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	4	2	6
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	53
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	136	74	210
(b) Diagnosis not completed ...	—	—	2

1. Number of cases on Dispensary Register on January 1st...	210
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	4
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	30
4. Cases written off during the year as Dead (all causes) ...	6
5. Number of attendances at the Dispensary (including contacts)...	385
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above...	—
7. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	30

RETURN SHOWING THE WORK OF THE WALLSEND DISPENSARY
DURING THE YEAR 1933.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous ...	91	18	109
(b) Diagnosis not completed ...	—	—	32
(c) Non-tuberculous... ..	—	—	93
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous ...	11	1	12
(b) Diagnosis not completed ...	—	—	8
(c) Non-tuberculous... ..	—	—	203
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	59	36	95
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	310
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	548	101	649
(b) Diagnosis not completed ...	—	—	28

1. Number of cases on Dispensary Register on January 1st...	724
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	52
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	86
4. Cases written off during the year as Dead (all causes) ...	65
5. Number of attendances at the Dispensary (including contacts)...	1,763
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above...	—
7. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	145

The tables opposite this page show in summary form the condition of all patients whose records are in the possession of the Dispensaries and, before studying these, the following notes on classification, etc., should be read :—

Patients diagnosed as suffering from *Pulmonary Tuberculosis* are placed in the following categories :—

Class T.B. minus, viz., cases in which tubercle bacilli have never been demonstrated in the sputum, pleural fluid, faeces, etc.

Class T.B. plus, viz., cases in which tubercle bacilli have at any time been found. It should be noted that a patient originally in Class T.B. minus must be transferred to Class T.B. plus at any stage in the course of treatment if and when tubercle bacilli are found ; while, on the other hand, a patient who is once placed in Class T.B. plus can never revert to Class T.B. minus.

Class T.B. plus is further subdivided into three groups as follows :—

Group 1.—Cases with slight constitutional disturbance, if any, *e.g.*, there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration ; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows :—Either present in one lobe only and in the case of an apical lesion of one upper lobe not extending below the second rib in front or not exceeding an equivalent area in any one lobe ; or where these physical signs are present in more than one lobe they should be limited to the apices of the upper lobes and should not extend below the clavicle and the spine of the scapula.

No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy does not exclude a case from this group.

Group 3.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function either local or general, and with little or no prospect of recovery.

All cases with grave complications (*e.g.*, diabetes, tuberculosis of intestine, etc.), whether those complications are tuberculous or not, are classified in this group.

Group 2.—All cases which cannot be placed in Groups 1 and 3. Patients suffering from Non-pulmonary Tuberculosis are classified according to the site of the lesion as follows :—

- (1) Tuberculosis of bones and joints.
- (2) Abdominal Tuberculosis (*i.e.*, tuberculosis of peritoneum, intestines or mesenteric glands).
- (3) Tuberculosis of other organs.
- (4) Tuberculosis of peripheral glands.

Patients suffering from multiple lesions are classified in one subgroup only, viz., in that applicable to the case which stands highest in the immediately preceding list.

(1.) PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1933 of all patients remaining on the Dispensaries' Registers; and (b) the reasons for the removal of all cases written off the Registers. The Table is arranged according to the years in which the patients were first entered on the Dispensaries' Registers as definite cases of pulmonary tuberculosis, and their classification at that time.

[illegible]

(II.) NON-PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1933 of all patients remaining on the Dispensaries' Registers; and (b) the reasons for the removal of all cases written off the Registers.

[illegible]

The following terms are used to describe the results of treatment :—

“*Quiescent.*”—Cases which have no symptoms of tuberculosis and no signs of tuberculous disease except such as are compatible with a completely healed lesion, and in which sputum, if present, is free from tubercle bacilli.

“*Arrested.*”—Cases in which, if pulmonary, the disease has been “quiescent” for a period of at least two years, or, if non-pulmonary, the disease is “quiescent” and there is reason to believe that it is unlikely to recur.

“*Recovered.*”—Cases in which arrest of the disease has been maintained for at least three years.

RESIDENTIAL INSTITUTIONS.

NUMBER OF BEDS AVAILABLE FOR THE TREATMENT OF TUBERCULOSIS
ON THE 31ST DECEMBER, 1933, IN INSTITUTIONS
BELONGING TO THE COUNCIL.

Name of Institution.	For PULMONARY cases.		For NON-PULMONARY cases.		TOTAL.
	Adults.	Children under 15.	Adults.	Children under 15.	
Wooley Sanatorium, Nr. Hexham	176	...	4	...	180
<i>Poor Law Institution.—For Tuberculosis (All Forms).</i>					
Dene Street House, Hexham	5	...	...	...	5
*Preston Hospital, North Shields	66	25	...	...	91

*(These beds are available for the Administrative County of Northumberland and the County Borough of Tyne-mouth.)

RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT AND
OBSERVATION DURING THE YEAR 1933 IN INSTITUTIONS (OTHER
THAN POOR LAW INSTITUTIONS) APPROVED FOR THE
TREATMENT OF TUBERCULOSIS.

		In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of doubtfully tuberculous cases admitted for observation	Adult M.	1	49	47	...	3
	F.	2	26	25	...	3
	Children	7	40	43	...	4
	TOTAL	10	115	115	...	10
Number of definitely tuberculous patients admitted for treatment	Adult M.	104	150	142	8	104
	F.	70	109	103	8	68
	Children	99	125	120	—	104
	TOTAL	273	384	365	16	276
GRAND TOTAL ...		283	499	480	16	286

RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT PROVIDED
DURING THE YEAR 1933, IN POOR LAW INSTITUTIONS FOR
PERSONS CHARGEABLE TO THE COUNCIL.

		In Insti- tutions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died In the Insti- tutions.	In Insti- tutions on Dec. 31st.
Number of patients suffering from pulmonary tuberculosis admitted for treatment.	Adult Males ...	5	20	15	5	5
	Adult Females	9	9	7	3	8
	Children...	2	4	3	1	2
	TOTAL...	16	33	25	9	15
Number of patients suffering from non pulmonary tuberculosis admitted for treatment.	Adult Males ...	3	2	2	1	2
	Adult Females	...	1	...	...	1
	Children...	2	3	1	...	4
	TOTAL...	5	6	3	1	7
GRAND TOTAL ...		21	39	28	10	22

RETURN SHOWING THE RESULTS OF OBSERVATION OF DOUBTFULLY
TUBERCULOUS CASES DISCHARGED DURING THE YEAR 1933
FROM INSTITUTIONS APPROVED FOR THE TREATMENT OF
TUBERCULOSIS.

Diagnosis on discharge from observation.	FOR PULMONARY TUBERCULOSIS.						FOR NON-PULMONARY TUBERCULOSIS.						TOTALS.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous ...	7	3	25	23	4	8	...	...	8	...	...	1	30	7	42
Non-tuberculous	4	4	...	13	14	...	...	...	...	...	...	...	17	18	...
Doubtful . ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
TOTALS ...	11	7	25	36	18	9	...	...	8	...	...	1	47	25	43

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF DEFINITELY
TUBERCULOUS PATIENTS DISCHARGED DURING THE YEAR 1933 FROM
INSTITUTIONS APPROVED FOR THE TREATMENT OF TUBERCULOSIS.

on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in Institution.															GRAND TOTALS.
			Under 3 months.			3-6 months			6-12 months.			More than 12 months.			Totals.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class T.B. minus.	Quiescent	8	9	2	24	20	22	23	6	32	10	1	13	65	36	69	170	
	Not quiescent ...	5	5	...	2	...	...	...	1	1	3	...	1	10	6	2	18
	Died in Institution	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Class T.B. plus Group I.	Quiescent ... ..	...	...	...	...	1	...	1	...	1	...	1	...	1	2	1	4
	Not quiescent ...	...	...	...	...	...	...	1	...	...	...	1	...	1	1	...	2
	Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Class T.B. plus Group II.	Quiescent	2	...	...	1	...	...	3	2	...	3	1	...	9	3	...	12
	Not quiescent ...	4	5	...	13	7	...	6	14	...	15	17	...	38	43	...	81	
	Died in Institution	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1
Class T.B. plus Group III.	Quiescent ... ..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
	Not quiescent ...	5	2	...	6	6	...	4	4	...	1	...	...	16	12	...	28
	Died in Institution	4	2	...	2	3	...	1	1	...	...	...	...	7	6	...	13
TALS.	PULMONARY ...	28	24	2	48	37	22	39	28	34	33	21	15	148	110	73	331	
Bones and Joints.	Quiescent ... ..	...	...	...	...	...	1	1	...	6	...	...	8	1	...	15	16
	Not quiescent ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
	Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abdominal.	Quiescent ... ..	...	...	...	...	...	8	...	...	8	...	...	3	...	...	19	19
	Not quiescent ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
	Died in Institution	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Other Organs.	Quiescent ... ..	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1	2
	Not quiescent ...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
	Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peripheral Glands.	Quiescent ... ..	...	...	1	...	...	3	...	...	4	...	...	1	...	...	9	9
	Not quiescent ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TALS.	NON-PULMONARY	...	1	3	1	...	12	1	...	18	...	...	14	2	1	47	50

REPORT OF THE MEDICAL SUPERINTENDENT,
WOOLEY SANATORIUM,
FOR THE YEAR ENDED 31ST DECEMBER, 1933.

During the year 1933, 297 cases were discharged from the Institution, a figure which represents a further reduction in the total number treated over previous years. The comparable figures are 357 in 1931 and 325 in 1932. How far this decrease is due to a decline in the incidence of Pulmonary Tuberculosis in the County is difficult to say. It may be a factor. It is also probable that the increasing use of the X-ray facilities at Wooley for diagnostic purposes has been responsible for eliminating a certain number of doubtful cases which would otherwise have been admitted for a period of institutional observation. This reduction has been very largely on the male side and as there are 108 male to 72 female beds available, it has been necessary to reconsider the most economical use of the beds at our disposal.

Two main principles have always been adopted as far as possible :—

1. New cases are admitted as soon as possible after diagnosis. This is very important in many cases and is vitally so in certain instances—for example, when some special form of treatment is required immediately—or when, as in young adults, there is a danger of rapid spread of the disease.

2. As far as possible the beds are kept fully occupied. This ensures the maximum utilisation of the resources available and keeps the cost per patient per week at the lowest possible figure.

Discharges have been regulated as far as is practicable to achieve these objects. It has therefore been possible to extend the period of treatment in a number of instances and this has been done in two main groups.

- (1) Cases who have responded well to general or special treatment and who have a reasonable prospect of arrest of the disease.
- (2) Advanced cases with little prospect of improvement but who are likely to be dangerous centres of infection to their households. In the long run it is probably cheaper to isolate such cases than to deal with subsequent cases from their families.

Chronic fibrotic cases form a reservoir available for discharge when new cases require admission. For them a period of sanatorium treatment is usually sufficient to restore a fair measure of health and their subsequent progress depends on their ability and willingness to lead a quiet restricted life.

At the same time there are always a number of discharges of patients who cannot afford for various reasons a very prolonged period of treatment.

On the women's side, the number of beds, 72, has been just about adequate to provide a reasonable duration of treatment without making much provision for cases solely requiring nursing and isolation. Cases which after a thorough trial have shown no response to treatment have perforce to be sent home, but discrimination is used in the

selection of such cases. Overcrowding, lack of nursing facilities and the presence of children in the household are regarded as sufficient reasons for retaining cases where no good result can be expected.

The results of treatment were as follows :—

Quiescent	...	...	...	...	...	...	119
Improved	...	...	...	...	...	...	88
No material improvement	...	...	...	...	...	...	39
Died	...	...	...	...	...	...	16
Non-tuberculous	...	...	...	...	...	...	35
							<hr/> 297 <hr/>

Average Duration of Stay.

The average period of treatment compared with previous years was as follows :—

	1930.	1931.	1932.	1933.
Male	191·20	194·19	240·77	223·80 Days
Female	150·80	164·21	162·71	192·30 do.

Treatment.

Pulmonary Tuberculosis is a disease which varies in its severity from a mild infection which is cured spontaneously to a rapidly fatal type which no form of treatment can alleviate. The majority of X-ray films of healthy persons show small well healed calcified foci of tuberculosis which are regarded as "normal" and occasionally one finds quite extensive calcified areas indicative of past disease which has been arrested without any special treatment.

It is with the group between those extremes that the sanatorium is concerned and each case presents an individual medical problem complicated by social and economic factors. The basic features of the sanatorium regime need not be recapitulated here but there is one point on which public opinion is not yet educated. The idea is still prevalent that a sanatorium must be a cold comfortless place and that such spartan severity is an essential part of the "cure". It is now recognised that discomfort and exposure to cold in winter are unnecessary. The three Convalescent Blocks at Wooley have no heating, and yet it is extraordinary how rarely these patients complain and how cheerfully they carry on in a severe winter. The explanation is, I think, largely psychological. Promotion from the acute wards to the convalescent represents a step forward and is an indication of progress, and the attendant discomfort is regarded as secondary. At the same time this conception of a sanatorium does deter some cases in winter from taking advantage of the treatment offered.

I would strongly recommend that the question of providing a system of heating on the wards should be considered.

Special Treatment.

Sanocrysin.—63 cases were treated by this drug during the period under review and the results confirm the experience of last year. The

Tuberculosis Officer has formed the opinion that cases which have responded well to this form of treatment are maintaining their improvement afterwards to a striking degree.

Artificial Pneumo-thorax, or collapse of the lung within its limitations, has shown some striking successes, and Sanocrysin has contributed in widening the scope of its applicability. Patients attend at Wooley for re-fills after discharge, as no facilities are available elsewhere and X-ray control is necessary. The number of re-fills is steadily increasing.

The most frequent cause of failure of this operation is the presence of adhesions which interfere with the collapse of cavities. The presence of such uncontrolled cavities is a constant danger to the patient, and renders arrest of the disease improbable.

The operation of phrenicectomy, which was dealt with in last year's report, frequently permits successful control to be obtained.

Division of adhesions by electro-surgical methods controlled by direct vision through the thoracoscope, is a recent development which in skilled hands has achieved very successful results. As the results in such cases are otherwise disappointing, this procedure is well worthy of a trial at Wooley. Some expensive apparatus and a dark room would be required.

The Surgical Treatment of Pulmonary Tuberculosis.

The greater accuracy of diagnosis since the introduction of X-rays has opened up possibilities of successful treatment by surgical methods in cases which were formerly considered unsuitable for a sanatorium and which were allowed to die a "natural" death.

The major surgery of the chest involves serious operative interference by a highly skilled surgeon as the physiology and physics of the thoracic cavity are quite different from other parts of the body. It is surely better to face the attendant risks than to accept complacently the fact of an inevitable fatal termination. No institution can be regarded as up-to-date which does not make provision for such cases.

X-Ray.

There has been a steady increase in the amount of X-ray work. Greater use has been made of the facilities available by the Tuberculosis Officer, and more routine films have been taken of the sanatorium patients as a guide to the control of treatment.

891 films were taken, 599 for the dispensaries and 292 of patients under treatment.

The filming of "suspects" from dispensaries revealed a number of early cases who showed no definite physical signs and who were then brought under treatment at a favourable stage of the disease. Other cases were discovered which showed a considerable amount of lung involvement with little or no evidence of the disease that could be detected clinically with ordinary methods. Occasionally the X-ray showed a condition where some special treatment was indicated urgently and it was possible to arrange for their immediate admission.

The re-filming of the sanatorium patients to study the effects of general and special methods of treatment has been a valuable and interesting part of the work. It is my personal impression that the results as so revealed are much better now than I was accustomed to see ten years ago.

It would be gratifying to think that better diagnosis and treatment were responsible for this improvement. No doubt they play a part, but it is also possible that Pulmonary Tuberculosis is becoming a milder disease in a larger proportion of cases. The latter may be the more important reason.

Bacteriology.

Repeated microscopic examinations of the sputum have been carried out as a routine measure. At present these are done under somewhat cramped conditions in the dispensary, which is not really a suitable place for this work.

The provision of a small laboratory would be a useful acquisition to the Institution as various other clinical investigations could be undertaken, such as culture work, blood sedimentation tests, and the examination of pleural effusions, etc.

Discipline.

The discipline of the patients has been very good. There were no dismissals from the Institution for misconduct.

Occupations.

The occupations of the patients discharged were as follows :—

Male.

Barber	...	...	...	1	Miner	...	...	...	54
Bricklayer	...	...	...	1	Moulder	...	...	...	1
Bus Conductor	...	...	...	2	Newsboy	...	...	...	1
Blacksmith's Striker	...	...	...	2	Nurse, Mental	...	...	...	1
Builder	...	...	...	1	Platelay	...	...	...	3
Barman	...	...	...	2	Postman	...	...	...	2
Boiler Maker	...	...	...	2	Painter	...	...	...	1
Baker	...	...	...	2	Plater's Helper	...	...	...	2
Boot Repairer	...	...	...	1	Plumber	...	...	...	3
Clerk	...	...	...	3	Poulterer	...	...	...	1
Caddy	...	...	...	1	Packer	...	...	...	1
Clergyman	...	...	...	1	Pattern Maker	...	...	...	2
Cook	...	...	...	1	Railwayman	...	...	...	2
Coppersmith	...	...	...	1	River Worker	...	...	...	1
Cabinet Maker	...	...	...	1	Rivetter	...	...	...	3
Driver (pit)	...	...	...	1	Rivet Heater	...	...	...	1
Engine Driver	...	...	...	1	Rivet Catcher	...	...	...	1
Electrician	...	...	...	2	Rope Maker	...	...	...	1
Engineer	...	...	...	2	Ship's Captain	...	...	...	1
Engineer (ship's)	...	...	...	1	Ship's Officer	...	...	...	1
Errand Boy	...	...	...	2	Sailor	...	...	...	2
French Polisher	...	...	...	1	School Boy	...	...	...	3
Farm Servant	...	...	...	1	Screeners	...	...	...	2
Fitter	...	...	...	3	Soldier	...	...	...	1
Fireman	...	...	...	1	Ship's Steward	...	...	...	1
Fruiterer	...	...	...	1	Shop Assistant	...	...	...	1
Gasfitter	...	...	...	1	Traveller	...	...	...	2
Gardener	...	...	...	2	Teacher	...	...	...	1
Glass Blower	...	...	...	1	Tailor	...	...	...	1
Inn Keeper	...	...	...	1	Woodman	...	...	...	1
Labourer	...	...	...	21	No occupation	...	...	...	2
Lead Miner	...	...	...	1					
Motor Mechanic	...	...	...	1					
Motor Driver	...	...	...	1					
Machinist	...	...	...	1					

Female.

Bus Conductress	...	...	2	Packer, Factory	...	...	2
Clerk	...	...	2	Rope Maker	...	...	1
Charwoman	...	...	1	Show Room Assistant	...	...	1
Domestic	...	...	44	Shop Assistant	..	...	5
Dressmaker	...	...	2	Teacher	...	...	1
Factory Worker	...	...	1	No occupation	...	...	1
Housewife	...	...	62				
Hair Dresser	...	...	1				129
Nurse	...	...	3				

BACTERIOLOGICAL LABORATORY.

The number of specimens submitted for routine examination during the year was 6,811. The nature of the specimens and a summary of the results are shown below :—

1,796 Sputa for B.Tuberculosis. 364 (20·2%) positive.

2,431 Swabs for B.Diphtheriae. 289 (11·8%) positive.

276 Specimens of blood for agglutination reactions. 99 (35·8%) gave positive reactions as follows :—

B.Typhosus “H,” 18; B.Typhosus “O,” 2; B.Paratyphosus “B,” 73; Br.Abortus, 4; B.Dysenteriae Flexner, 2.

380 Swabs for Haemolytic Streptococci. 21 (5·5%) positive.

300 Specimens of faeces examined for organisms of the enteric-dysentery group. The following organisms were isolated :—
B.Typhosus, 1; B.Paratyphosus “B,” 59; B.Dysenteriae Flexner, 12; B.Dysenteriae Sonne, 1; B.Enteritis Gaertner, 1; B.Morgan No. 1, 6.

145 Specimens of urine examined for organisms of the enteric group. B.Paratyphosus was isolated from 9.

19 Specimens of urine for general bacteriological examination.

24 Specimens of cerebro-spinal fluid. Organisms found :—
Meningococcus, 10; Pneumococcus, 1; “B.Influenzae,” 5.

22 Swabs for isolation of B.Diphtheriae and virulence test. 8 positive.

20 Post-nasal swabs for meningococci.

63 Miscellaneous specimens comprising :—pleural fluid, 5; pus, 4; sections of udder for B.Tuberculosis, 3; faeces for B.Tuberculosis, 4; urine for B.Tuberculosis, 3; blood culture, 2; swab from eye, 1; fluid from knee, 2; milk for organisms of enteric group, 2; milk for actinomyces, 1; bovine blood for agglutination v. Br.Abortus, 19 (14 positive); samples of ice cream, 17.

56 Samples of water.

599 Samples of milk for examination for B.Tuberculosis.

680 Samples of milk for estimation of bacterial content and B.Coli

Table I. shows the number of pathological specimens received from the various administrative districts in the County.

TABLE I.
Pathological Specimens.

District.			Sputa for B. Tuberculosis.			Swabs for B. Diphtheriae.			Bloods for Agglutination.			Mis- cella- neous.	TOTAL
			+	—	Total.	+	—	Total.	+	—	Total.		
<i>Boroughs.</i>													
Berwick	...	...	6	22	28	...	11	11	...	1	1	3	43
Blyth	...	...	48	129	177	3	20	23	9	9	18	8	226
Morpeth	...	...	8	29	37	...	6	6	1	3	4	...	47
Wallsend	...	...	83	340	423	13	85	98	...	...	...	23	544
<i>Urban Districts.</i>													
Alnwick	...	...	9	38	47	...	8	8	...	1	1	1	57
Amble...	...	...	3	16	19	...	3	3	...	...	...	...	22
Ashington	...	...	28	137	165	18	138	156	57	122	179	382	882
Bedlington	...	...	17	136	153	29	125	154	6	7	13	10	330
Cramlington	...	...	...	6	6	1	1	2	...	...	...	5	13
Earsdon	...	...	15	34	49	1	3	4	...	...	...	...	53
Gosforth	...	...	13	30	43	7	85	92	...	2	2	47	184
Hexham	...	...	5	43	48	2	13	15	2	2	4	7	74
Longbenton	...	...	18	46	64	...	8	8	2	1	3	3	78
Newbiggin	...	...	10	31	41	4	41	45	...	3	3	...	89
Newburn	...	...	13	67	80	2	12	14	2	1	3	...	97
Prudhoe	...	...	3	20	23	...	22	22	1	1	2	...	47
Rothbury	...	...	1	3	4	...	1	1	...	...	...	1	6
Seaton Delaval	...	...	11	25	36	4	6	10	...	...	...	3	49
Seghill...	...	...	1	...	1	...	1	1	...	...	...	...	2
Weetslade	...	...	4	10	14	1	3	4	...	...	...	...	18
Whitley	...	...	12	58	70	4	118	122	...	4	4	7	203
<i>Rural Districts.</i>													
Alnwick	...	...	10	21	31	3	5	8	1	...	1	...	40
Belford	...	...	1	8	9	...	10	10	...	1	1	...	20
Bellingham	...	...	1	12	13	...	13	13	...	...	...	...	26
Castle Ward	...	...	7	20	27	51	891	942	...	3	3	377	1349
Glendale	...	...	3	12	15	...	...	...	1	2	3	...	18
Haltwhistle	...	...	4	11	15	1	2	3	...	...	...	1	19
Hexham	...	...	6	45	51	1	42	43	6	6	12	26	132
Morpeth	...	...	15	67	82	2	25	27	10	6	16	25	150
Norham & Islandshires	...	...	2	2	4	...	2	2	...	...	...	...	6
Rothbury	...	...	3	2	5	1	1	2	...	1	1	4	12
Other †	...	...	4	12	16	141	441	582	1	1	2	40	640
			364	1432	1796	289	2142	2431	99	177	276	973	5476

† Includes Hospitals.

Milk Samples Examined for B.Tuberculosis.

The total number of samples examined was 599, of which 72 (12%) were positive, 524 negative and 3 inconclusive. There were 534 samples of bulk milk, 41 (7.72%) being positive, 490 negative and 3 inconclusive. The remaining 65 samples were submitted by veterinary officers from individual animals suspected to be suffering from tuberculosis, 31 (47.6%) being positive, and 34 negative.

The following designated milks were included among the bulk samples :—Certified, 1 (negative); Grade "A. TT," 4 (4 negative); Grade "A," 21 (1 positive, 20 negative); Pasteurised, 2 (2 negative). 3 samples of "sterilised" milk were also examined. all being negative.

Table II. shows the districts in which the bulk samples were collected, together with the results.

TABLE II.

Milk Samples for B. Tuberculosis.

District.	Positive.	Negative.	Total.
Berwick ... ..	...	8	8
Blyth ... ..	...	19	19
Ashington	2	34*	36 * 2 inconclusive.
Bedlington	3	46	49
Earsdon ... ..	...	1	1
Longbenton ... ..	...	1	1
Newbiggin	3	17	20
Newburn	5	77	82
Seaton Delaval	8	23	31
Whitley and Monkseaton	4	46	50
Alnwick R.D. ... ..	...	6	6
Belford	1	21	22
Castle Ward ... ..	...	7	7
Glendale ... ..	...	14	14
Hexham R.D.	15	131	146
Morpeth R.D. ... ..	...	11	11
Norham ... ..	...	31*	31 * 1 inconclusive.
	41	493	534

Milk Samples Examined for Total Count and B. Coli.

The total number of samples examined was 680, of which 438 were "ordinary" milks, 234 were "designated" milks, while the remaining 8 samples were described as "sterilised."

Table III. shows the districts from which the samples were received.

TABLE III.

Milk Samples for Total Count and B. Coli.

District.	Ordinary Milk.	Designated Milks.				Sterilised.	Total.
		Certified.	Grade A. TT.	Grade A.	Pasteurised.		
Berwick	9	...	...	...	...	...	9
Blyth	18	...	5	4	...	...	27
Alnwick U.D.	1	...	1	...	...	...	2
Amble ... ..	...	...	11	...	...	...	11
Ashington	21	...	...	...	...	...	21
Bedlington	60	...	...	...	...	...	60
Cramlington ... ..	...	...	...	3	...	...	3
Earsdon ... ..	...	...	...	6	...	...	6
Gosforth	31	...	...	...	5	...	36
Hexham U.D.	3	...	...	...	...	...	3
Longbenton ... ..	...	...	...	3	...	...	3
Newbiggin	20	...	3	...	...	...	23
Newburn	113	6	31	1	30	8	189
Seaton Delaval	29	...	...	9	...	...	38
Whitley & Monkseaton	53	...	...	4	...	...	57
Alnwick R.D.	2	...	...	37	...	...	39
Belford	22	...	...	...	...	...	22
Castle Ward	3	...	...	28	...	...	31
Glendale	11	...	...	19	...	...	30
Hexham R.D.	7	...	4	24	...	...	35
Morpeth R.D.	4	...	...	...	...	...	4
Norham	31	...	...	...	...	...	31
TOTALS	438	6	55	138	35	8	680

The results of the examination of the samples of designated milk were as follows :—

Designation.	Complied with standard.	Did not comply.		TOTAL.
		Number.	Per cent.	
Certified	4	2	33	6
Grade A. TT.	39	16	29	55
Grade A.	110	28	20	138
Pasteurised	34	1	2	35
TOTALS	187	47	20	234

The results of the examination of the samples of “ ordinary ” milk are summarised in the following table :—

Number of organisms per cc.	B.Coli content.
Less than 20,000 185	Not present in 1.0 cc. 107
21,000 to 50,000 65	Present in 1.0 cc.... 94
51,000 to 100,000... .. 33	„ 0.1 cc.... 67
101,000 to 200,000 35	„ 0.01 cc. 61
201,000 to 500,000 43	„ 0.001 cc. 45
501,000 to 1,000,000 28	„ 0.0001 cc. 29
Over 1,000,000 49	„ 0.00001 cc. 35
TOTALS 438	438

With regard to the 8 samples of “ sterilised ” milk, none contained B.Coli in quantities of 1.0 cc. or less. In 7 of the samples, the bacterial count was recorded as “ Nil ”; in the remaining sample, the count was 6,900 per cc.

Samples of Water.

56 samples were submitted for examination during the year. The results are shown in the following table :—

Sample submitted by.	Number of samples.	Classification.			
		I.	II.	III.	IV.
Berwick	4	2	1	1	...
Alnwick U.D.	3	2	...	1	...
Ashington	4	3	...	1	...
Newbiggin	8	1	...	...	7
Newburn	1	...	...	1	...
Belford	2	1	...	...	1
Glendale	4	2	1	1	...
Hexham R.D.	15	4	1	1	9
County Architect's Dept. ...	8	2	...	1	5
County Health Dept. ...	7	...	...	3	4
TOTALS	56	17	3	10	26

In addition to the foregoing routine work the following additional investigations have also been carried out :—

(a) During part of the year the examination of milk samples for Br. *Abortus*, the causative organism of undulant fever, was continued. 245 samples were examined of which 48 (19·5%) were positive.

Contagious abortion of cattle is a disease which has been well known for a great many years and the causative organism, now called *Brucella abortus*, was isolated by Bang in 1897. But it is only recently that human infection with this organism has been recognised, and up to 1929, when a report on the subject by Dalrymple-Champneys was published by the Ministry of Health, only 14 authentic cases of endemic origin had been reported in this country. The occurrence of these cases, however, obviously demanded further investigation, two essential requirements being first, to ascertain, as far as possible, the actual incidence of the human disease, and second, since cattle are the source, and milk the most likely vehicle, of infection, to determine to what extent the milk supply is contaminated with this organism.

Inquiries on these lines have been pursued in the County Laboratory during the last three years. During this period specimens of blood from 425 patients suffering from a febrile illness have been examined and in 16 of these the disease has been found to be due to infection with Br. *abortus*. This finding corresponds closely to the results obtained by other workers in various parts of the country and using such figures as a basis Prof. Wilson calculates that the actual incidence is probably not less than 500 cases per year in this country. This number may not appear to be very large, but it is by no means negligible especially as the period of disability resulting from the infection is frequently prolonged.

As regards the extent to which the milk supply is contaminated, 145 (20·1%) of 720 bulk samples of milk sent to the laboratory for examination for B. tuberculosis were found to contain Br. *abortus*. Here again the results are generally in accord with those found in other parts of the country though the Northumberland figure is perhaps slightly below the average, a circumstance which may possibly be explained by the fact that a large proportion of the samples examined came from small herds of less than 10 cows. It may be noted that although the available evidence strongly suggests that raw milk is responsible for most of the cases of undulant fever in this country, elsewhere, as e.g., in France and U.S.A., sheep and pigs appear to be important sources of infection.

That Br. *abortus* in milk may be the cause of human disease has raised a further complication in the problem of a safe milk supply. Hitherto, in this connection, attention has been focussed almost exclusively on the eradication of B. tuberculosis, but it has been shown that Certified and Grade A tuberculin tested milks—i.e., tubercle free milks—are as frequently infected with Br. *abortus* as is ordinary milk; and the question arises whether *abortus* infection can continue to be ignored, having regard especially to measures at present being contemplated with a view to a large increase in the use of milk as a beverage.

(b) An experiment was begun towards the end of 1932 on the comparative value of complement fixation and flocculation methods in the serological diagnosis of Syphilis. This has been continued throughout the year, parallel tests being performed on a further 566 blood specimens.

FOOD INSPECTION.

Milk and Dairies (Consolidation) Act, 1915.

The systematic examination of milk from the dairy herds within the County for the purpose of detecting animals infected with tuberculosis has been continued during the year.

Samples are collected at the farms by the District Sanitary Inspectors and forwarded to the County Council's Laboratory at Newburn, where the biological test is carried out. Where samples are found to contain tubercle bacilli, clinical examination of the herds from which the samples were obtained is made by the County Veterinary Inspectors, when any animal presenting suspicious symptoms is isolated and subjected to further examination and individual test.

During the year 1933 the number of samples examined under this arrangement was 428, representing 362 herds, and 4,964 cows.

Of this number, 29 samples were found to contain tubercle bacilli.

Twenty-six herds were involved, the whole of the milk from which was in consequence infected. Fourteen cows were found to be diseased and were slaughtered under the Tuberculosis Order, whilst in 12 instances the offending animals escaped detection.

A tabular statement showing the work done in this direction since the inception of the scheme in 1927, together with a detailed summary accompanies this report and is shown opposite page 50.

From the summary it will be seen that 1,927 samples have been examined since the inception of the routine sampling scheme in October, 1927, representing 1,493 herds.

The total number of infected herds was 85, giving an annual percentage of 4.88.

The percentage of cows found to be tubercular over the period works out at 0.38 (per annum), varying between 0.16 and 0.62.

The latter figures cannot be taken as a reliable index of the number of individual animals affected, for it will be seen from the summary that whereas the number of herds definitely known to be infected was—over the whole period—85, the actual number of animals detected and slaughtered after clinical examination was only 59. In some cases more than one infected animal was found in the same herd, so that the percentage of infected herds in which the offending animal or animals escaped detection is actually higher than the difference between 85 and 59 implies.

This is a disappointing aspect of the procedure which detracts from any suggestion of depending entirely upon clinical examination for the detection of infected animals.

At the present juncture the routine veterinary inspection of dairy cattle is being vigorously advocated in certain quarters. The number of annual deaths from Bovine Tuberculosis is cited as an argument in favour of such measures, and it is inferred that routine inspection of milch cows would eliminate this form of Tuberculosis. It would appear that the whole subject is being viewed very much out of its true perspective. Those who believe that routine inspection of dairy cattle will eradicate Tuberculosis are unduly optimistic. The difficulties of diagnosing tubercle in the human subject are great notwithstanding the advantage of modern scientific ancillaries; in the bovine the difficulties are infinitely greater, and the opinion may be expressed that little real progress in this direction is likely to be made until animals are tested by a standardised Tuberculin prepared by and issued from a central Government Laboratory and used only by trained

and experienced veterinarians. It is not denied that some good will be accomplished, but will the expenditure involved give a commensurate return? After the first few months of such a service the surgeons would be mainly employed in the supervision and production of clean milk; it seems wrong that any persons should be able to expose for sale any food-stuff which may not be wholesome, and that the purchaser himself should be held responsible for the purity of its production. Even with all these precautions there will still be risk in the use of an organic product unless some means of actual sterilisation are used, and this could be effected by efficient pasteurisation. There is no excuse for dirty milk and it is not submitted that the process of pasteurisation relieves the producer of any responsibility with regard to the cleanliness of his milk, but there is an aspect of the question which does not appear to have received much attention. It is a fact that some degree of immunity may be developed by the ingestion of small doses of Bacilli taken over long periods. That the ingestion of live Bacilli is a dangerous practice is amply demonstrated by the fact that over 2,000 deaths occur annually as the result of Bovine Tuberculosis. If all milk drunk was efficiently pasteurised these figures would be revolutionised and the immunising qualities of the fluid would not be materially altered. Lest there be any misunderstanding let it be stated that the drinking of milk from diseased animals is not advocated or recommended but we must take things as we find them and make the best of them. One of the most distinguished bacteriologists at present living recently wrote as follows: "With regard to the problem of immunisation by means of tubercular milk I do not doubt at all that such immunisation may be effective, but I do think all immunisation with living germs is dangerous and if you pasteurise tubercular milk, I take it that would be much safer and I dare say quite as effective a vaccine, also I am much impressed with the fact that we now have hardly any tubercular glands in our out-patients. We used to have hundreds in the year."

In the above extract one of the large London hospitals is referred to, the inference being that the milk consumed in London now is almost all pasteurised.

Milk (Special Designations) Order, 1923

The number of licenses in operation in the County during the year under the provisions of the above Order was as follows:—

*Licenses to produce "Certified" milk	...	...	...	5
*Licenses to produce "Grade A," Tuberculin tested milk				9
†Licenses to produce "Grade A" ...	...	...	...	27
				—
				41
				—

(*Issued by the Ministry of Health.)

(†Issued by the County Council.)

List of producers holding licenses to produce "Certified" or "Grade A, Tuberculin tested" milk:—

"Certified."

J. J. Phillipson, Bishops Field, Allendale.

C. S. Richardson, Wheelbirks Farm, Stocksfield.

D. H. Sanderson, The Birks, Stamfordham.

F. H. Sanderson, Eshott Home Farm, Felton.

F. H. Sanderson, Eshott North East Farm.

NORTHUMBERLAND COUNTY COUNCIL.
(MILK AND DAIRIES (CONSOLIDATION) ACT, 1915. S.8). (MILK AND DAIRIES ORDER, 1926. PART IV).
ROUTINE MILK SAMPLING 1927 (Oct.) to 1933 (Dec.).

Sanitary Districts.	1932.		1927 to 1932 (inclusive).				1933.				TOTAL.	
	No. of Cow-keepers.	No. of Cows.	No. of Samples.	No. found to contain Tub. Bac.	No. of Cows slaughtered in consequence	No. of Cows Samples.	No. found to contain Tub. Bac.	No. of Cows slaughtered in consequence	No. of Samples.	No. found to contain Tub. Bac.	No. of Cows slaughtered in consequence	No. of Cows slaughtered in consequence
<i>Municipal Boroughs.</i>												
1. Berwick-on-Tweed ...	47	208	25	1	1	8	...	...	33	1	1	1
2. Blyth ...	17	197	24	1	...	19	...	...	43	1	...	...
3. Morpeth ...	2	38	2	...	...	...	...	...	2	...	...	...
4. Wallsend ...	12	130	14	1	2	...	...	...	14	1	2	2
<i>Urban Districts.</i>												
5. Alnwick ...	12	135	31	...	...	3	...	...	34	...	...	...
6. Amble ...	7	108	8	...	...	...	...	...	8	...	...	...
7. Ashington ...	6	84	23	1	2	8	...	...	31	1	2	2
8. Bedlington ...	48	440	105	8	4	49	...	...	154	10	4	4
9. Cramlington ...	13	117	5	...	...	1	...	...	6	...	...	...
10. Earsdon ...	17	194	21	2	3	1	...	...	22	2	3	3
11. Gosforth ...	3	46	8	1	1	1	...	...	8	1	1	1
12. Hexham ...	27	250	36	1	1	2	...	...	38	1	1	1
13. Longbenton ...	21	353	44	...	...	...	...	...	44	...	...	...
14. Newbiggin-by-Sea ...	5	48	20	2	...	4	...	...	24	2	...	...
15. Newburn ...	25	385	55	3	4	63	...	...	118	8	7	7
16. Prudhoe ...	25	250	43	3	1	...	...	...	43	3	1	1
17. Rothbury ...	5	13	8	...	...	...	...	...	8	...	...	...
18. Seaton Delaval ...	16	160	20	...	...	31	...	...	51	8	1	1
19. Seghill ...	3	56	7	1	3	...	...	...	7	1	3	3
20. Weetslade ...	7	50	7	1	1	...	...	...	7	1	1	1
21. Whitley and Monkseaton ...	8	100	25	1	1	4	...	...	29	2	2	2
<i>Rural Districts.</i>												
22. Alnwick ...	80	500	51	1	1	3	...	...	54	1	1	1
23. Belford... ..	20	314	27	...	...	22	...	...	49	...	...	...
24. Bellingham ...	31	135	31	...	...	...	...	...	31	...	...	...
25. Castle Ward ...	101	1,546	83	3	1	8	...	...	91	3	1	1
26. Glendale ...	23	129	34	1	...	15	...	...	49	1	...	...
27. Haltwhistle ...	53	547	52	2	1	...	...	...	52	2	1	1
28. Hexham ...	596	5,067	423	17	10	144	...	...	567	30	19	19
29. Morpeth ...	125	1,865	211	14	8	12	...	...	223	14	8	8
30. Norham and Islands.	32	222	36	...	...	31	...	...	67	...	...	...
31. Rothbury ...	8	156	20	...	...	...	...	...	20	...	...	...
	1,395	13,843	1,499	65	45	428	29	14	1,927	94	59	59

SUMMARY OF EXAMINATIONS OF MILK SAMPLES FOR TUBERCULOSIS FROM HERDS WITHIN THE COUNTY, FROM OCT., 1927, TO DEC., 1933.

No. of Cowkeepers in the County (1932 Register) = 1,395
No. of Cows in the County (1932 Register) = 13,843

Period.	No. of Samples Collected.	No. of Cows represented.	% of Cows in County Tested.	No. of Herds represented.	% of Herds Tested.	No. of Samples found to be infected.	% of Herds giving infected Milk.	% of Cows found to be Tubercular.	No. of Cows slaughtered in consequence.
Oct., 1927, to Dec. 31st, 1928 ...	318	42,872	23.50	227	16.3	10	4.27	0.52	15
Jan., 1929, to Dec. 31st, 1929 ...	242	2,104	16.00	190	13.4	12	5.26	0.57	8
Jan., 1930, to Dec. 31st, 1930 ...	277	2,073	15.80	211	15.14	18	5.68	0.62	13
Jan., 1931, to Dec. 31st, 1931 ...	207	1,676	12.10	161	11.54	*10	3.72	0.17	3
Jan., 1932, to Dec. 31st, 1932 ...	455	3,587	25.90	342	24.51	**15	3.21	0.16	6
Jan., 1933, to Dec. 31st, 1933 ...	428	4,964	35.83	362	25.94	†29	7.18	0.28	14
Total (or Average) ...	1,927	17,276	129.13	1,493	106.83	94	4.88	0.38	59

* 8 herds. ** 11 herds. † 26 herds.

“ Grade A, Tuberculin tested.”

G. S. Moffitt & Sons, Field House Farm, Acklington.
 W. Davison, Morwick Mill, Warkworth.
 J. V. S. Harrison, Pia Troon, Allendale.
 A. B. Howie, Eshott Brocks, Felton.
 G. F. McNay, Morwick, Morpeth.
 Mrs. Walter Runciman, Home Farm, Doxford Hill,
 Chathill.
 C. H. Sanderson, Newlands, Belford.
 M. Jordan, Whorlton Hall, Westerhope.
 Rural Development Co., Ltd., Corbridge.

The number of “ Grade A ” licenses issued during the year show an increase of 4 over the preceding year, the licensees being as follows :—

“ Grade A ” (to produce and bottle).

Wm. Robson, Low Horton, Bebside.
 Chas. H. Dickie, Wooperton Farm.
 T. O. Shield, Heddon Banks, Heddon-on-the-Wall.
 J. H. Patterson & Sons, Cottage Farm, Wooler.
 Wm. Laidler & Son, Anick Grange, Hexham.
 A. & E. Forster, Hope House, Alnwick.
 A. J. W. Thompson, Silvermoor Farm, Alnwick.
 F. J. Christopher, Unthank Farm, Shotley Bridge.
 A. M. Keith, East Elrington, Haydon Bridge.
 John S. Bell, Avenue Head Farm, Seaton Delaval.
 Leslie Farr, Wooden Farm, Alnmouth (from Lesbury Mill).
 J. C. Cuthbertson, Stocksfield Hall Farm, Stocksfield.
 Rex D. Irwin, Kirkley Hall Farm, Ponteland.
 Fenwick A. Jackson, Holywell Bank Top, Seaton Delaval.
 A. E. Marshall, Boulmer House, Alnmouth.
 David B. Cocks, Bridge End Farm, Wooler.
 J. Blenkinsop, Heatherslaw Farm, Stamfordham.
 Thos. B. Younger, Kenton Manor House, Newcastle upon
 Tyne.
 John G. Vert, Rake House Farm, Shiremoor.
 H. R. S. Gibb, Eachwick Farm, Dalton, Newcastle upon
 Tyne.
 Jas. Shell, Waterside House, Alnmouth.
 Harry Hedley, Benton Place Farm, Longbenton.

“ Grade A ” (to produce only).

Henry Bell, East Hartford, Cramlington.
 R. Spearman & Sons, Chapel Farm, Stamfordham.
 Andrew Luke, So. E. Farm, Eshott, Felton.
 Wm. Taylor, West Moor, Felton.
 J. B. Ralph, Ogle Castle, Ponteland.

All “ Grade A ” herds are clinically examined every three months by the County Council’s Veterinary Officers, and the milk from each herd is examined bacteriologically at least four times per year at the County Laboratory, whilst the farms are visited periodically to ensure the observance of the Conditions imposed by the Order.

One hundred and thirty-three samples of milk were collected from “ Grade A ” farms, and tested to the standard laid down by the Milk (S.D.) Order, 1923. Twenty-three samples (from 13 farms) exceeded the standard in total organisms or B.Coli content. In each case suitable measures were adopted to ensure rectification.

MEAT AND FOOD INSPECTION.

The following districts have made "nil" returns, that is to say, no unsound meat or food has been found within the districts :—Alnwick, Ainble, Cramlington, Earsdon, Longbenton, Newbiggin, Rothbury (Urban), Seaton Delaval, Seghill, Weetslade, Alnwick (Rural), Belford, Bellingham, Glendale, Haltwhistle, Norham and Islandshires, and Rothbury (Rural).

With the exception of Newbiggin and Haltwhistle it is noted that the same districts figure year after year with "nil" returns.

Either meat inspection in these districts has been developed to such a degree of efficiency that the vendor of diseased or unsound food finds no market for his wares, or no systematic food inspection is carried out; the latter is probably the true explanation.

Appended is a table showing a summary of the returns for the past four years :—

COUNTY OF NORTHUMBERLAND. FOOD INSPECTION, 1933. P.H.A. 1875, s. 116—119. P.H.A. 1890, s. 28.

Meat and Food condemned on account of diseased or unsound conditions :—

SANITARY DISTRICTS.

Municipal Boroughs.

1. Berwick-on-Tweed	...	Beef, 287 stones; Mutton, 2 stones; Pork, 13½ stones.
2. Blyth	...	Beef, 100 stones; Mutton, 9 stones; Pork, 6 stones; Liver, 160 lbs.
3. Morpeth	...	Beef, 4 cwt. 2 stones; Mutton, 1 cwt. 1 stone; Pork, 8 cwt. 4 stones; Livers, 3 cwt. 4 stones; Fish, 1 cwt. 3 stones; Fruit, 2 cwt. 2 stones; Provisions, 2 cwt. 1 stone; Rabbits, 3 stones.
4. Wallsend	...	...

Urban Districts.

5. Alnwick	...	Nil.
6. Amble	...	Nil.
7. Ashington	...	Beef, 212 stones; Pork, 12 stones; Bacon, 21 lbs.
8. Bedlington	...	Beef, 32 stones; Pork, 8 stones; also certain organs in 53 instances.
9. Crumlington	...	Nil.
10. Earsdon	...	Nil.
11. Gosforth	...	Internal organs of 1 sheep.
12. Hexham	...	Beef, 50 stones.
13. Longbenton	...	Nil.
14. Newbiggin-by-the-Sea	...	Nil.
15. Newburn	...	Beef, 168½ stones; Mutton, 8 stones; Pork, 87 stones.
16. Rudhoe	...	Beef, 9 stones, ditto (imported), 7 stones; Pork, 21 stones.
17. Rothbury	...	Nil.
18. Seaton Delaval	...	Nil.
19. Seghill	...	Nil.
20. Weetslade	...	Nil.
21. Whitley & Monkseaton	...	Carcasses, or part carcasses of 4 Beasts, 8 Pigs, 2 Sheep. Also 3 Turkeys, 52 Fowls, 2 Rabbits, 80 lbs. Frozen Meat, 4 lbs. Ham, 1 tin of Tongue, 9½ quarts Mussels, and a large quantity of internal organs from Beasts, Pigs and Sheep. Total weight of Food condemned = 6,854½ lbs.

Rural Districts.

22. Alnwick	...	Nil.
23. Belford	...	Nil.
24. Bellingham	...	Nil.
25. Castle Ward	...	Pork, 2 stones; Poultry, 30 lbs.
26. Glendale	...	Nil.
27. Haltwhistle	...	Nil.
28. Hexham	...	Beef, 135 stones; Pork, 25 stones.
29. Morpeth	...	Beef (home-killed), 120 stones, (imported) 14 stones; Mutton, 6 stones; Pork, 4 stones; Livers and Organs, 90 stones.
30. Norham & Islandshires	...	Nil.
31. Rothbury	...	Nil.

Meat and Food Inspection.

Sanitary Districts.	1930	1931	1932	1933
<i>Municipal Boroughs.</i>				
1. Berwick-on-Tweed	*	*	*	(No Return)
2. Blyth	*	*	*	*
3. Morpeth	*	*	*	*
4. Wallsend	*	*	*	*
<i>Urban Districts.</i>				
5. Alnwick	Nil	Nil	Nil	Nil
6. Amble	*	*	Nil	Nil
7. Ashington	*	*	*	*
8. Bedlington	*	*	*	*
9. Cramlington	*	Nil	Nil	Nil
10. Earsdon	*	Nil	Nil	Nil
11. Gosforth	Nil	*	*	*
12. Hexham	*	*	*	*
13. Longbenton	Nil	Nil	Nil	Nil
14. Newbiggin-by-Sea	*	Nil	*	Nil
15. Newburn	*	*	*	*
15. Prudhoe	*	Nil	*	*
17. Rothbury	Nil	Nil	Nil	Nil
18. Seaton Delaval ...	Nil	Nil	Nil	Nil
19. Seghill	Nil	Nil	Nil	Nil
20. Weetslade... ..	Nil	Nil	(No Return)	Nil
21. Whitley & Monk- seaton	*	*	*	*
<i>Rural Districts.</i>				
22. Alnwick	Nil	Nil	Nil	Nil
23. Belford	Nil	Nil	Nil	Nil
24. Bellingham	Nil	Nil	Nil	Nil
25. Castle Ward	*	*	*	*
26. Glendale	Nil	Nil	Nil	Nil
27. Haltwhistle	Nil	Nil	* (?)	Nil
28. Hexham	*	*	*	*
29. Morpeth	*	*	*	*
30. Norham & Islands.	Nil	Nil	Nil	Nil
31. Rothbury	Nil	Nil	Nil	Nil

* Quantities are shewn in the Annual Report for each year.

SALE OF FOOD AND DRUGS ACTS.

The County Council is the administrative authority under the above Acts throughout the administrative County, excepting in the area of the Borough of Berwick-upon-Tweed. Samples for examination by the County Analyst are taken by the Police. The results of the analyses of samples taken during 1933 and the percentage of those found to be adulterated are shown in the subjoined table.

No. of Samples taken.	Description of Article.	Result of Analysis.			Percentage of Samples Not Genuine.	Vendor Prosecuted.	Convictions including cases dismissed on payment of costs.
		Genuine.	Not Genuine.	Doubtful.			
2	Arrowroot	2	—	—	—	—	—
9	Bacon	9	—	—	—	—	—
28	Baking Powder	28	—	—	—	—	—
1	Beef Suet	1	—	—	—	—	—
55	Butter	55	—	—	—	—	—
2	Cake Flour	2	—	—	—	—	—
1	Camphorated Oil	1	—	—	—	—	—
15	Cheese	15	—	—	—	—	—
12	Cocoa	12	—	—	—	—	—
1	Cocanut	1	—	—	—	—	—
10	Coffee	10	—	—	—	—	—
1	Condensed Sweetened Skimmed Milk	1	—	—	—	—	—
4	Cooked Ham	4	—	—	—	—	—
1	Corned Beef	1	—	—	—	—	—
13	Cornflour	13	—	—	—	—	—
3	Cream	3	—	—	—	—	—
2	Cream of Tartar	2	—	—	—	—	—
28	Currants	28	—	—	—	—	—
14	Custard Powder	14	—	—	—	—	—
3	Dried Apricots	3	—	—	—	—	—
4	Dried Milk	4	—	—	—	—	—
1	Egg Substitute Powder	1	—	—	—	—	—
1	Evaporated Milk	1	—	—	—	—	—
1	Farina	1	—	—	—	—	—
2	Farola	2	—	—	—	—	—
1	Flour	1	—	—	—	—	—
2	Fruit Salad	2	—	—	—	—	—
1	Ginger Bread	1	—	—	—	—	—
1	Glauber Salts	1	—	—	—	—	—
1	Glycerine	1	—	—	—	—	—
1	Glycerine, Honey and Lemon Juice	1	—	—	—	—	—
15	Ground Almonds	15	—	—	—	—	—
4	Ground Ginger	4	—	—	—	—	—
21	Ground Rice	21	—	—	—	—	—
3	Ham	3	—	—	—	—	—
2	Ice Cream	2	—	—	—	—	—
3	Icing Sugar	3	—	—	—	—	—
35	Jams	34	1	—	2·77	1	1
42	Lard	42	—	—	—	—	—
3	Lemonade Crystals	3	—	—	—	—	—
2	Lemon Peel	2	—	—	—	—	—
1	Lentil Soup	1	—	—	—	—	—
352	Carried forward	351	1	—	—	1	1

No. of Samples taken.	Description of Article.	Result of Analysis.			Per- centage of Samples Not Genuine.	Vendor Prosecuted.	Convic- tions including cases dis- missed on payment of costs.
		Genuine.	Not Genuine.	Doubtful.			
352	Brought forward ...	351	1	—	—	1	1
1	Malted Milk Cocoa ...	1	—	—	—	—	—
33	Margarine ...	33	—	—	—	—	—
262	Milk ...	236	26	—	9.92	14	13
6	Mincemeat ...	6	—	—	—	—	—
1	Mixed Dried Fruits ...	1	—	—	—	—	—
3	Mustard ...	2	1	—	33.33	—	—
4	Oatmeal ...	4	—	—	—	—	—
1	Olive Oil ...	1	—	—	—	—	—
2	Ovaltine ...	2	—	—	—	—	—
2	Peas ...	2	—	—	—	—	—
17	Pepper ...	17	—	—	—	—	—
2	Potted Meat ...	2	—	—	—	—	—
4	Prunes ...	4	—	—	—	—	—
12	Raisins ...	12	—	—	—	—	—
9	Rice ...	9	—	—	—	—	—
1	Rolled Beef ...	1	—	—	—	—	—
5	Sauce ...	5	—	—	—	—	—
18	Sausage... ...	18	—	—	—	—	—
6	Self Raising Flour ...	6	—	—	—	—	—
10	Semolina ...	10	—	—	—	—	—
4	Shredded Beef Suet ...	3	1	—	25	1	—
4	Split Peas ...	4	—	—	—	—	—
15	Sugar ...	15	—	—	—	—	—
1	Sugared Almonds ...	1	—	—	—	—	—
12	Sultanas ...	12	—	—	—	—	—
10	Sweets ...	10	—	—	—	—	—
1	Swiss Roll ...	1	—	—	—	—	—
1	Table Jelly ...	1	—	—	—	—	—
3	Tapioca... ...	3	—	—	—	—	—
37	Tea ...	37	—	—	—	—	—
1	Trex ...	1	—	—	—	—	—
1	Turkey and Tongue Paste... ...	1	—	—	—	—	—
1	Vernicelli ...	1	—	—	—	—	—
34	Vinegar... ...	32	2	—	5.88	1	—
1	Wheatmeal ...	1	—	—	—	—	—
2	Yeast ...	2	—	—	—	—	—
1	Yorkshire Relish ...	1	—	—	—	—	—
880	TOTALS ...	849	31	—	3.52	17	14

Public Health (Condensed Milk) Regulations, 1923 and 1927; Public Health (Dried Milk) Regulations, 1923 and 1927; Public Health (Preservatives, etc., in Food) Regulations, 1925-1927.—Although no samples were taken during the year ended 31st December, 1933, under the above Regulations, all samples taken under the Sale of Food and Drugs Acts were tested by the County Analyst for preservatives. Proceedings were taken in three cases, and three convictions resulted.

Berwick-upon-Tweed.—The following table indicates particulars of samples taken, and results of analyses, etc., during the year. A total of 40 samples were submitted for examination :—

Nature of Sample.	No. of Samples taken.	Found Genuine.	Doubtful	Non-Genuine.	Prosecutions.	Convictions.
Milk	17	17	—	—	—	—
Butter	2	2	—	—	—	—
Tea	3	3	—	—	—	—
Sausage	3	3	—	—	—	—
Margarine	2	2	—	—	—	—
Cocoa	1	1	—	—	—	—
Pepper	1	1	—	—	—	—
Peas	1	1	—	—	—	—
Self-raising flour ..	2	2	—	—	—	—
Bacon	1	1	—	—	—	—
Potted Meat	1	1	—	—	—	—
Cornflour	1	1	—	—	—	—
Custard Powder	1	1	—	—	—	—
Lentils	1	1	—	—	—	—
Sugar	1	1	—	—	—	—
Ground Rice	1	1	—	—	—	—
Raisins	1	1	—	—	—	—
	40	40	—	—	—	—

All of the above samples were also tested by the Analyst for the presence of preservatives beyond the prescribed limits and were reported “genuine” in this respect.

RIVER POLLUTION AND SEWERAGE.

Although improvements have taken place in some of the sewage treatment works, and in one or two instances new works have been provided, the position in regard to the pollution of rivers and streams remains substantially the same as in the previous year.

River Tyne.—The whole of the sewage from the towns of Haltwhistle and Haydon Bridge, and from the villages of Fourstones, Corbridge, and Wylam is discharged in crude condition into the river, and a similar condition exists at Mickley Station.

Belford Burn.—A large proportion of the sewage from Belford village is discharged into the burn without treatment.

It is more than ironic, and a decided reflection upon administrative authority that local Councils who are the legal guardians of the maintenance of the purity of our rivers and streams, should themselves often be the greatest defaulters in causing or permitting the pollution thereof.

New Sewage Disposal Works have been installed at Whalton and Stamfordham for the respective villages, and existing works at Stanington, Ponteland, Netherton, and Click-em-in—all in the Castle Ward rural area—have been re-conditioned.

Shilbottle.—A commencement has been made with the re-sewerage, and the installation of sewage disposal works for the village of Shilbottle, in the Alnwick rural district.

HOUSING.

The number of houses erected within the administrative County during the year 1933 was 2,343. This is the highest figure for any year since the war, and brings the total number of post-war houses up to 20,646.

Local Authorities were responsible for the erection of 762 houses, the largest contributors being Wallsend with 188, and Blyth with 180.

Private enterprise contributed 1,581 during the same period, of which number 224 were erected in the Castle Ward Rural District, 172 in Whitley and Monkseaton Urban District, 131 in Gosforth Urban District, 128 in Longbenton Urban District, 117 in Wallsend and 112 in Blyth, the remainder being spread in smaller numbers throughout the County.

Of the gross post-war total, 12,824 (62%) were assisted by the State subsidy, and Local Authorities have erected 8,879 (43%).

The largest additions to individual districts during the post-war period are Whitley and Monkseaton, 2,839; Wallsend, 1,950; Blyth, 1,597; Castle Ward, 1,338; Gosforth, 1,284; Bedlingtonshire, 1,186; Ashington, 1,052; Longbenton, 1,044; Newburn, 1,025; and Earsdon, 1,012.

Full details of the additions in each district will be found in the Table ("A") opposite this page.

SANITARY CONVENIENCES.

It is again noted that progress continues in the direction of eradicating the insanitary privy and pail closet, and the substitution of the water-carriage system.

The policy is being followed in practically every county district, and during the year under review 739 of these obsolete structures were abolished, and 859 water closets substituted.

WATER SUPPLIES.

A Committee has been formed to survey the needs of the whole County.

HOUSING, 1933. TABLE A.
Reference : { " A " With State assistance. { " C " by Local Authority.
 { " B " without State assistance. { " D " by other persons.

No.	District.	Erected by :-	Total 1920-30.		1931.		1932		1933.		Total.		Totals.	Gross Total.
			A.	B.	A.	B.	A.	B.	A.	B.				
1	Borwick M.B.	...	340	7	—	—	—	2	—	8	—	408	408	497
2	Blyth M.B. ...	...	740	201	—	131	85	—	14	—	180	1,091	1,091	1,597
3	Morpeth M.B.	...	201	2	—	50	—	—	42	5	24	225	269	340
4	Wallsend M.B.	...	889	269	156	73	95	—	15	—	188	1,293	1,449	1,950
5	Alnwick U.D.	...	153	65	—	20	—	—	—	—	50	203	203	304
6	Amble U.D....	...	—	72	—	11	—	—	—	—	—	—	—	155
7	Ashington U.D.	...	394	473	—	71	—	—	—	—	66	460	460	1,052
8	Bedlington U.D.	...	504	384	—	26	100	—	—	—	60	714	714	1,186
9	Cramlington U.D.	...	242	11	—	28	—	—	—	—	—	242	242	288
10	Earsdon U.D.	...	564	309	—	24	—	—	—	—	20	584	584	1,012
11	Gosforth U.D.	...	208	265	—	401	112	—	59	—	—	320	320	1,284
12	Hexham U.D.	...	176	15	—	86	71	—	4	—	—	266	266	419
13	Longbenton U.D.	...	176	79	—	371	62	—	53	—	64	302	302	1,044
14	Newbiggin-by-the-Sea U.D.	...	196	119	—	7	—	—	—	—	—	196	196	350
15	Newburn U.D.	...	710	88	—	69	20	—	19	—	—	730	730	1,025
16	Prudhoe U.D.	...	274	50	—	17	—	—	4	—	—	274	274	389
17	Rothbury U.D.	...	—	16	—	30	—	—	3	—	—	—	—	89
18	Seaton Delaval U.D.	...	—	44	—	163	—	—	1	—	—	—	—	219
19	Seghill U.D....	...	115	65	—	6	16	—	—	—	—	155	155	231
20	Weetslade U.D.	...	183	100	—	146	—	—	7	—	76	259	259	549
21	Whitley & Monkseaton U.D.	...	407	549	—	1,333	—	—	199	—	—	407	407	2,839
22	Alnwick R.D.	...	96	88	—	61	6	—	7	—	6	108	108	293
23	Belford R.D.	...	—	76	—	97	—	—	7	—	—	—	—	255
24	Bellingham R.D.	...	1	16	—	18	—	—	—	—	18	19	19	59
25	Castle Ward R.D.	...	84	302	—	435	48	—	126	—	—	132	132	1,338
26	Glendale R.D.	...	—	47	—	90	24	—	13	—	—	24	24	180
27	Haltwhistle R.D.	...	57	21	—	23	—	—	4	—	—	57	57	110
28	Hexham R.D.	...	8	98	—	273	12	—	40	—	—	20	20	505
29	Morpeth R.D.	...	88	297	—	350	—	—	14	—	—	158	158	897
30	Norham & Islandshires R.D.	...	24	5	—	19	—	—	4	—	2	26	26	60
31	Rothbury R.D.	...	6	5	—	95	—	—	4	—	—	6	6	130
Total of C			6,836	158	651	42	430	—	762	—	8,679	8,679	20,646	
" " D			4,138	4,584	—	629	5	820	2	1,579	4,145	11,767		
" " C & D			10,974	4,742	651	671	435	820	764	1,579	12,824	20,646		
" " A, B, C & D			15,716		1,322		1,255		2,343		20,646			

HOSPITALS.

Isolation Hospitals.

The amount of hospital accommodation available for the isolation of infectious disease was as indicated in the subjoined table. The population of the 30 Sanitary Districts for which isolation hospital accommodation was provided was 403,257, and the beds provided numbered 535, independently of the accommodation at port hospitals, giving one bed for each 753 of population.

Newbiggin-by-the-Sea is the only district in the county without means for isolating cases of infectious disease, cases from this district being sent to the Newcastle-upon-Tyne Corporation and Morpeth R.D.C. Hospitals.

	Popula- tion served.	Number and kind of hospitals provided.	Beds provided for		
			Small- pox.	Infectious diseases other than Small-pox	Small-pox or other Infectious diseases.
JOINT HOSPITAL DISTRICTS.					
(1) <i>Earsdon Joint Hospital District—</i>					
Earsdon U.D.	} 70,779	Iron buildings :—	16	...	...
Seghill U.D.		At Earsdon Grange (1)			
Whitley & Monkseaton U.D.		Two permanent brick buildings and	...	72	...
Longbenton U.D.		† One iron building			
Seaton Delaval U.D.		At Scaffold Hill (1)			
Cramlington U.D.					
(2) <i>Gosforth, Newburn, and Castle Ward Joint Hospital District—</i>					
Gosforth U.D.	} 52,70	Permanent building ...	...	32	...
Newburn U.D.					
Castle Ward R.D.					
(3) <i>The urban and rural districts of Alnwick and Rothbury and the rural district of Belford—</i>					
Alnwick U.D.	} 29,398	Iron and wood building	24	...	..
Alnwick R.D.					
Rothbury U.D.					
Rothbury R.D.					
Belford R.D.					
(4) <i>The urban and rural districts of Rothbury—</i>					
Rothbury U.D.	} 5,627	do.	...	8	...
Rothbury R.D.					
(5) <i>Hexham rural and Prudhoe—</i>					
Hexham R.D.	} 30,009	do.	12	10	.
Prudhoe U.D.					
(6) <i>Longtown and Border—</i>					
Alston, etc., R.D.	} *8,466	do.	...	16	..
Brampton R.D.					
Longtown R.D.					
Haltwhistle R.D.					

	Popula- tion served.	Number and kind of hospitals provided.	Beds provided for		
			Small- pox.	Infectious diseases other than Small-pox	Small-pox or other Infectious diseases.
II. HOSPITALS PROVIDED BY INDIVIDUAL SANITARY AUTHORITIES.					
Berwick M.B.	12,230	{ One wooden building	8	...	...
Blyth M.B.	33,080	{ Iron & wood building	...	30	...
Morpeth M.B.	7,529	{ Permanent building ..	8	...	...
Wallsend M.B.	43,950	{ Iron building ..	4	...	...
Alnwick U.D.	6,973	{ Brick building ..	...	24	...
Amble U.D.	4,238	{ Permanent building ..	20	...	...
Ashington U.D.	29,760	{ do. ..	...	86	...
Bedlingtonshire U.D. ...	27,500	{ Permanent building ..	...	15	...
Gosforth U.D.	18,290	{ Iron building ..	4	...	...
Hexham U.D.	8,876	{ Brick building ..	...	45	...
Newburn U.D.	19,670	{ One brick building ..	10	...	...
Glendale R.D.	7,760	{ Iron & brick building ..	...	18	...
Morpeth R.D.	19,050	{ Permanent building ..	7	...	...
Norham and Island- shires R.D.	4,936	{ Two iron and wood buildings	8	16	...
River Blyth Port Sanit- ary Authority		{ One iron and wood building	4	...	...
		{ Two cottages ... ..	...	...	8
		{ One iron and wood hospital	24	...	...
		{ do. ..	6	...	...
		{ Permanent building ...	...	20	...

† Now used only in cases of emergency.

* In this County.

	Popula- tion served.	Number and kind of hospitals provided.
III. SANITARY AUTHORITIES HAVING MADE ARRANGE- MENTS FOR PATIENTS TO BE RECEIVED BY NEIGHBOURING SANIT- ARY AUTHORITIES.		
Blyth U.D.	33,080	Patients from this district are received into the hospital of the Blyth Port Sanitary Authority
Weetslade U.D.	7,708	Patients from this district are received into the Gosforth, Newburn and Castle Ward Joint Hospital
Bellingham R.D.	5,228	Do. do.
Castle Ward R.D.	14,800	Smallpox cases are received into the Gosforth U.D. Smallpox Hospital
Norham and Island- shires R.D.	4,936	Cases of infectious disease, other than Smallpox, are removed, when occasion requires, to Berwick Borough Infectious Diseases Hospital under an agreement with the Borough Council
River Tyne Port Sanit- ary Authority		All "Port" cases of infectious disease are received into the Walkergate and North and South Shields Infectious Diseases Hospitals

Institution Hospitals.

The following table indicates the various Institution Hospitals maintained by the County Council under the Poor Law Act, 1930, and the number of beds available in each during the year 1933.

In the case of the Preston Hospital, North Shields, the total number of the beds in the hospital is shewn, as it is not possible to give the exact number occupied by County Council patients during the year.

Name of Institution.	General, Medical, and Surgical.		Chil-dren.	Chronic Sick.		Venereal.		Tuberculosis.		Isolation.		Mater-nity.		Mental.		Mental Defectives.		Total.	
	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	†F.	Total.
Alnwick ...	—	—	1	15	17	—	—	1	—	1	—	1	—	—	—	—	—	17	20
Berwick-on-Tweed	—	—	2	23	21	—	—	—	—	—	—	2	—	—	—	—	—	23	25
Glendale ...	—	—	—	5	4	—	—	—	—	—	—	1	—	7	1	—	—	5	13
Greenholme, Haltwhistle ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38	—	—	38
Dean Street House, Hexham ...	34	25	23	—	—	—	—	5	—	—	—	2	—	—	—	3	7	42	57
Newgate Street, Morpeth ...	12	14	—	—	—	—	—	2	1	4	3	2	—	—	—	—	—	18	20
Ponteland ...	11	12	2	—	—	—	—	—	—	2	—	4	—	—	—	—	—	13	20
Rothbury... Preston Hospital, North Shields...	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	39	—	—	44
	84	81	†95	58	28	6	4	40	26	—	—	12	—	2	2	—	—	190	248
TOTALS...	141	132	128	101	70	6	4	48	27	7	6	24		2	9	41	47	346	447
																			793

† Includes children. † Includes 25 beds for Tuberculosis cases. § Includes Chronic Sick.

Voluntary Hospitals.

The number of beds available in Voluntary Hospitals in the administrative county during the year 1933, was as follows :—

Alnwick Infirmary	...	...	...	27 (including 2 cots).
Ashington Hospital	...	...	...	44 (including 2 cots).
Berwick Infirmary	...	...	...	36 (including 3 cots).
Blyth Hospital	...	...	...	30 (including 3 cots).
Corbridge Hospital	...	...	...	14 (including 1 cot).
Haltwhistle Hospital	...	...	...	17 (including 2 cots).
Hexham War Memorial Hospital	...	...	...	40
Morpeth Cottage Hospital	...	...	...	13
Rothbury Cottage Hospital	...	...	...	16
Newburn Cottage Hospital	...	...	...	14
Wallsend Infirmary	...	...	...	20 (including 3 cots).
				271

There were 862 beds available during the year, in the various voluntary Hospitals in Newcastle upon Tyne, to which County patients are admitted ; the following table shews the approximate number of beds in each :—

Royal Victoria Infirmary	(approximately)...	610 (plus 86 in paybed section and 35 in Innes Hopkins Memorial Home.
Fleming Memorial Hospital	...	94
Princess Mary Maternity Hospital	...	70
Northern Womens' Hospital	...	21
Eye Hospital	...	28
Throat, Nose and Ear Hospital	...	35
Chest Hospital	...	4

The percentage proportion of beds occupied throughout the year by each of the areas from which patients are admitted to the Royal Victoria Infirmary, was as follows :—

	In-patients.	Out-patients.
Durham County	45.48	47.58
Northumberland	29.82	26.29
City of Newcastle	22.95	25.82
Other places	1.75	0.31

and the number of patients admitted from the administrative County of Northumberland during the year was 3,830. The analysis of the waiting list at about the end of the year shews the following results :—

Durham County...	726
Northumberland County	411
City of Newcastle	384
County Borough of Gateshead	263
County Borough of South Shields	27
County Borough of Tynemouth	4

PUBLIC ASSISTANCE.

Remuneration of Poor Law District Medical Officers.

The Public Assistance Committee considered the following report of the County Medical Officer with regard to the remuneration of District Medical Officers in the industrial areas in the County :—

The basis of remuneration for part time domiciliary medical officers presents considerable difficulties, especially at the present juncture. From the inception of the service there does not appear to have been any co-ordinated scheme. Boards of Guardians were elected and districts were apportioned but no recognised scale of remuneration appears to have been constructed. Consequently, a very anomalous state of affairs now exists.

The following memorandum refers to the industrial portion of the South East area and the medical officers attached thereto; it includes :

<i>District.</i>				<i>Medical Officer.</i>
Bedlington	...	...	...	Dr. W. Hudson.
Cramlington	...	...	...	Dr. T. G. Quinn.
Ashington	...	...	...	Dr. G. R. Spence.
Weetslade	...	...	...	Dr. T. Craig.
Wallsend	...	...	...	Dr. H. H. Aitchison.
Blyth	...	...	...	Dr. T. Gallacher.
Prudhoe	...	...	...	Dr. G. McCoull.
Willington Quay	...	...	...	Dr. L. Craig.
Lemington	...	...	...	Dr. H. C. Coxon.
Newburn	...	...	...	Dr. G. B. Picton.

At the outset it may be pointed out that the complaint made by some of the medical officers, of inadequate and unreasonable remuneration, has been found to be justified.

A considerable number of men and women who were insured under the National Health Insurance Act have already passed out of medical benefit and many more will do so at the end of the present year. Many persons who were formerly entitled to the services of panel doctors will no longer be able to demand those services as a right, and in case of illness will either have to be attended by the doctor gratuitously or be compelled to avail themselves of the Poor Law Medical Service.

This simple statement is far reaching in its implications. Many of these people who have contributed for years to a service and have never required to use it feel aggrieved when they do require treatment, particularly at a time when their financial position is strained, that they are not entitled to it. Incidentally they would prefer to be attended by a practitioner of their own choosing rather than be compelled to accept the services of the District Medical Officer.

The Panel Doctor feels a grievance inasmuch as he must either attend the patient gratuitously or see him attended by the District Medical Officer who is most probably a competitor in panel practice, and he has doubts as to whether, when times change and patients return to the National Health Insurance Scheme, he will ever get them back on his own panel, and feels that they will be finally lost to him and that they will remain on the panel of the Poor Law Medical Officer.

It is felt that the Poor Law Medical Officer enjoys an unfair advantage, and it has been suggested that a way of overcoming this difficulty would be to allow any practitioner to enter into a contract with the Public Assistance Committee and for the patient to choose one of a panel of such doctors who would be paid on a modified capitation basis.

In Newcastle upon Tyne such a scheme is now being considered. Several of the leading Poor Law Medical Officers are due for retirement and the moment is favourable for the institution of another scheme, the basis of which is that all monies previously paid for domiciliary medical service will be pooled and any practitioner who desires can enter into a contract with the City Council. His name will be placed on a panel and any person requiring medical treatment under the Poor Law Acts can choose from this panel any doctor whom he desires to attend him; each doctor will send in his claim at the end of the year for remuneration, such remuneration being based according to the demands upon the pool.

In this County it would be impossible to adopt such a scheme immediately, the Medical Officers having contracts with the Council and declining to relinquish them. The above is the only possible way in which a panel system could be inaugurated. The Poor Law Medical Service differs from the National Health Service in that the latter is contributory and compulsory, each contributor chooses his own medical attendant who is paid a definite fee whether the contributor is sick or well. Medical attention is available at any time and is the right of the contributor. On the other hand the Poor Law patient does not come on to the doctor's list until he is actually sick and must accept the services of the appointed Medical Officer. Since he goes off the list on recovery, there would be great difficulty in assessing the amount to be paid under such conditions upon a purely panel basis similar to that of the National Health Insurance Act.

Some difficulty was experienced owing to the absence of any standard of remuneration and index of work done, and with a view to overcoming this the following scheme was put into operation. Medical Officers were asked to keep records of all services rendered to Poor Law patients during a period of twelve months. These were recorded under the headings—Visits to Homes, Consultations at Surgery, Medicine Supplied, Dressings Supplied and Certificates Issued. Each separate entry under these five heads was counted as a "unit" of service, and the total for each district divided into the remuneration at present paid to the Medical Officer. The results (as set out in the accompanying schedule) were very striking and yielded figures ranging from 1.79d. to 2/8.43d. per "unit" in the ten districts. The individual total "units" varied from 185 to 4,508 and the sum of £620 15s. 0d. was paid in salaries for a total of 18,909 "units" of service or an average of 7.87d. "per unit."

There are existing in various parts of the country and in this county, certain Public Medical Services. Investigations have been made as to the actual amount received by practitioners for the services rendered and it appears that 1/6 per "unit" of service is the average fee received in this county. After consideration it was felt that payment on the "unit" system was not satisfactory inasmuch as the value of every service was equal, whether a Visit to Home or a Certificate issued. It was finally decided to allocate a certain number of "points" for each service and to attach a monetary value of 4½d. to each "point."

This has been done in the following table :—

	Value in "Points."	Value at $4\frac{1}{2}$ d. per "Point."
		s. d.
Visits to Homes	4	1 6
Consultations at Surgery	3	1 $1\frac{1}{2}$
Medicine supplied	2	9
Dressings supplied	2	9
Certificates issued	1	$4\frac{1}{2}$

Calculated upon the above basis the suggested remuneration of the District Medical Officers for the period under consideration would be :—

	Total No. of "Points."	Salary based on $4\frac{1}{2}$ d. per "Point."
		£ s. d.
Dr. W. Hudson	3,669	68 15 $10\frac{1}{2}$
Dr. T. G. Quinn	514	9 12 9
Dr. G. R. Spence	1,198	22 9 3
Dr. T. Craig	3,540	66 7 6
Dr. H. H. Aitchison	11,799	221 4 $7\frac{1}{2}$
Dr. T. Gallacher	9,492	177 19 6
Dr. G. McCoull	7,616	142 16 0
Dr. L. Craig	9,071	170 1 $7\frac{1}{2}$
Dr. H. C. Coxon	2,743	51 8 $7\frac{1}{2}$
Dr. G. B. Picton	1,960	36 15 0
		<hr/>
		£967 10 9

If such a scheme of remuneration were adopted it would mean an annual increase of about £350. It is suggested that if and when such a scheme is put into operation the following conditions should be made, subject to agreement with the Medical Officers :—

1. That no cases shall be attended by Poor Law Medical Officers without a written order from the Relieving Officer.
2. That a Medical Card be kept for each individual patient attended, showing full details of each service rendered.
3. That these Medical Cards be available for inspection by the County Medical Officer at any time, and that at the end of the year shall be returned to his office for comparison with the records of the Relieving Officers. Should it be found that the work further increases or decreases, any revision of remuneration should be on the basis adopted.
4. That no Poor Law Medical Officer's remuneration be reduced below the amount paid at present.
5. That certain expensive drugs, for which a tariff will be formed, be paid for by the Local Authority.
6. If the Committee decide to accept the recommendations contained herein, they should be made retrospective as promised in the case of Dr. McCoull, to the date of his application, and in the case of the others to January 1st, 1933.

At the present time the Wiltshire County Council are introducing, with the approval of the Ministry of Health, a scheme for the provision of medical services to Public Assistance patients through the medium of local medical practitioners under contract.

According to the "County Council Gazette" the scheme is to apply to the whole of the administrative county, except that the arrangements are not to be brought into operation in any medical relief district until a vacancy occurs in the office of District Medical Officer for that area, but eventually all districts will, if there are medical practitioners who reside or carry on business therein and are willing to contract with the County Council, be served by such practitioners.

A further scheme has been put forward by the Reading Authority and worked out in conjunction with the Reading Insurance Committee.

Details of the scheme put forward by the Reading Authority were submitted by the County Medical Officer, and the Committee decided :

(i) That the County Medical Officer arrange with the District Medical Officers in the County to keep records of all services rendered to poor law patients ;

(ii) That the salaries of the following District Medical Officers be fixed at the amounts shown, in respect of the year ending 31st December, 1933, viz. :—

				Proposed salary.	Present salary.		
				£	£	s.	d.
Dr. W. Hudson...	...	...	...	69	66	0	0
Dr. T. Craig	...	...	...	66	25	0	0
Dr. H. H. Aitchison	...	...	...	221	175	0	0
Dr. T. Gallacher	...	...	...	178	87	0	0
Dr. G. McCoull...	...	...	...	143	18	15	0
Dr. L. Craig	...	...	...	170	112	0	0
Dr. H. C. Coxon	...	...	...	51	40	0	0

(iii) That, as promised in the case of Dr. McCoull, his increased rate of remuneration be made retrospective to the 1st October, 1931 ;

(iv) That from 1st January, 1934, the ten District Medical Officers enumerated in the report of the County Medical Officer be paid quarterly on the basis of medical services rendered, with a minimum of remuneration as contained in their agreements with the Council ; and

(v) That general approval be given to the remaining recommendations of the County Medical Officer outlined in his memorandum and which are not dealt with above.

SCHEDULE.

POOR LAW DISTRICT RETURNS.

District.	Medical Officer.	Visits to Homes.	Consultations at Surgery.	Medicine supplied.	Dressings supplied.	Certificates supplied.	Total units.	Salary.	Payment per unit.	At 1/- per unit.
								£ s. d.		£ s. d.
3	Dr. W. Hudson	411	335	342	116	104	1,308	66 0 0	1/0.11d.	65 8 0
5	Dr. T. G. Quinn	46	62	59	8	10	185	25 0 0	2/8.43d.	9 5 0
6	Dr. G. R. Spence	112	151	119	3	53	438	22 0 0	1/0.05d.	21 18 0
8	Dr. T. Craig	332	427	332	20	227	1,338	25 0 0	4.48d.	66 18 0
9	Dr. H. H. Aitchison	1,005	1,313	1,627	23	540	4,508	175 0 0	9.31d.	225 8 0
11	Dr. T. Gallacher	970	968	909	151	588	3,586	87 0 0	5.82d.	179 6 0
Wylam	Dr. G. McCoull	881	835	681	112	1	2,510	18 15 0	1.79d.	125 10 0
10	Dr. L. Craig	880	696	1,600	54	155	3,385	112 0 0	7.94d.	169 5 0
22	Dr. H. C. Coxon	366	226	217	—	167	976	40 0 0	9.83d.	48 16 0
Castle Ward	Dr. G. B. Picton	271	180	102	10	112	675	50 0 0	1/5.77d.	33 15 0
	TOTALS	5,274	5,193	5,988	497	1,957	18,909	£620 15 0		£945 9 0

Increase if paid at 1/- per unit £324 14s. 0d.

POOR LAW MEDICAL OUT-RELIEF.

The following table indicates the various Medical Out-relief districts in the County :—

Guardians Committee Area.	District.	Area in Acres.	Population—1931 Census.
North No. 1	Belford—West	25,877	2,112
	Do. East	13,920	2,502
	Berwick...	14,111	13,181
	Norhamshire	20,151	2,228
	Islandshire	19,186	1,808
	Carham	13,068	889
	Chatton	36,269	1,529
	Ford	23,236	1,745
	Glendale—Southern	21,994	571
	Lowick	12,879	877
	Wooler	40,484	2,443
		241,175	29,885
	<i>Plea piece common to E. & W. Lilburn, Ilderton & Roseden C.Ps.</i>	3	...
	<i>Undivided moor common to Kirknewton & Lanton, C.Ps.</i>	8	...
		241,186	29,885
North No. 2	Alnwick	4,778	6,883
	Embleton	20,200	2,375
	Felton	9,026	1,171
	Glanton	27,021	1,468
	Lesbury	10,645	2,368
	Shilbottle	15,526	1,704
	Warkworth	11,875	7,733
	Rothbury—East	28,601	2,102
	Do. West	19,477	1,398
	Rothley	15,097	258
	Harbottle	59,553	777
	Elsdon	18,931	383
	Whittingham	26,204	850
		266,934	29,470
	<i>Intermixed lands common to Rothbury & Snitter, C.P.</i>	23	...
		266,957	29,470
Central	Ponteland	44,545	9,558
	Stamfordham	30,254	2,788
	Stannington	10,314	1,920
	<i>Carried forward</i>	85,113	59,355
		598,143	

Guardians Committee Area.	District.	Area in Acres.		Population— 1931 Census.	
Central— <i>Contd.</i>	<i>Brought forward...</i>	85,113	508,143	14,266	59,355
	Morpeth — No. 1	327		7,391	
	Do. No. 2	11,745		4,806	
	Do. No. 2a	2,620		9,863	
	Do. No. 3	10,123		27,799	
	Do. No. 4	15,776		4,787	
	Do. No. 5	17,087		820	
	Do. No. 6	676		19,623	
	Do. No. 6a	8,881		12,095	
	Do. No. 7	4,573		258	
	Do. No. 8	16,127		2,307	
	Do. No. 9	9,607		521	
	Blyth	4,319		31,680	
			186,974		136,216
	<i>Longhorsley Com-</i> <i>mon common to</i> <i>Bigge's, Riddells,</i> <i>and Freeholders'</i> <i>Qtrs. C.Ps. ...</i>		23		...
	<i>Horsley Moor com-</i> <i>mon to Bigge's</i> <i>Qtr., Fenrother</i> <i>Freeholders and</i> <i>Riddell's Qtrs.</i> <i>C.Ps.</i>		192		...
			187,189		136,216
South	...				
	Gosforth	1,303		18,044	
	Whitley	1,983		24,210	
	Seaton Delaval ...	5,352		7,377	
	Seghill	1,425		2,582	
	Cramlington ...	4,583		8,238	
	Earsdon	4,709		13,086	
	North Longbenton	5,348		14,074	
	Weetslade	2,201		7,734	
	Wallsend	1,629	(approx.)	29,725	
West	Willington Quay	1,793	do.	14,862	
			30,326		139,932
	Bellingham—No. 1	19,719		1,287	
	Do. No. 2	104,787		820	
	Do. No. 3	58,369		873	
	Do. No. 4	13,228		756	
	Do. No. 5	30,518		956	
	Do. No. 6	20,024		599	
	Lemington	1,864		9,180	
	Newburn	2,808		10,362	
	Haltwhistle—				
	Eastern	34,103		5,823	
	Western	27,461		2,390	
	Southern	22,282		419	
	<i>Carried forward...</i>	335,163	725,658	33,465	335,503

Guardians Committee Area.	District.	Area in Acres.		Population— 1931 Census.	
	<i>Brought forward...</i>	335,163	725,658	33,465	335,503
West— <i>Contd.</i>	Whitfield ...	12,481		278	
	Hexham ...	12,203		10,290	
	Slaley ...	27,001		1,409	
	Shotley ...	15,244		1,129	
	Blanchland ...	11,184		331	
	Humshaugh ...	37,597		2,802	
	Haydon... ..	22,031		2,954	
	Allendale ...	9,631		1,475	
	Wylam ...	5,495		11,165	
	Ovingham ...	10,508		2,825	
	Corbridge ...	22,211		3,936	
	Allenheads ...	4,748		743	
	Ninebanks ...	4,987		394	
			530,484		73,196
	<i>Allendale Common</i> <i>—stinted pasture</i> <i>common to Allen-</i> <i>dale and West</i> <i>Allen C.Ps. ...</i>		18,107		...
	<i>Moorland common</i> <i>to Townships of</i> <i>ancient Parish of</i> <i>Hexham (viz.,</i> <i>Hexham and Hex-</i> <i>hamshire High,</i> <i>Low, Middle and</i> <i>West Quarters) ...</i>		4,903		...
			553,494		73,196
			1,279,152		408,699
	<i>Newcastle-on-Tyne</i> <i>R.D. (Moorhall</i> <i>and precincts) ...</i>		1		5
			1,279,153		408,704

PUBLIC VACCINATION.

A list of Public Vaccinators and of the Vaccination Officers in the County will be found at the commencement of this report.

The accompanying table is a return relating to the year ended December 31st, 1932, and includes (last two columns) information relating to the year 1933.

There are again in some areas of the County many defaulting parents who have not obtained exemption on conscientious grounds, etc. It is the duty of Vaccination Officers to prosecute such persons, but proceedings have not been taken in any of the cases concerned.

Registration Sub-districts.	No. of Births returned in the "Birth List Sheets" as registered from 1st January to 31st December, 1932.	Number of these Births duly entered by 31st January, 1934, in Columns I., II., IV. and V. of the "Vaccination Register," (Birth List Sheets), viz:—					Number of these Births which on 31st January, 1934, remained unentered in the "Vaccination Register," on account (as shown by "Report Book") of				No. of these Births remaining on 31/1/34 neither duly entered in the "Vaccination Register," (Cols. 3, 4, 5, 6 and 7 of this return) nor temporarily accounted for in the "Report Book" (Cols. 8, 9 and 10 of this return).	Total No. of Certifi- cates and copies of Certificates of successful Primary Vaccination of Children under 14 received during the calendar year 1933.	No. of Statutory Declarations of Conscientious objection actually received by the Vaccination Officers irrespective of the dates of birth of the children to which they relate during the calendar year 1933.
		Col. I. Success- fully vaccin- ated.	Col. II.		Col. IV. No. in respect of whom Statutory Declara- tions of conscien- tious objection have been received.	Col. V. Died un- vaccin- ated.	Postpone- ment by Medical Certifi- cate.	Removal to Districts the Vac- cination Officers of which have been duly appraised.	Removal to places unknown or which cannot be reached and cases not having been found.				
			Insus- ceptible of vac- cination.	Had Small- pox.									
1	2	3	4	5	6	7	8	9	10	11	12	13	
Allendale...	49	19	1	...	23	2	...	1	2	1	11	32	
Alnwick ...	102	43	1	...	50	2	2	2	2	...	36	76	
Ashington ...	865	128	3	...	560	53	7	...	24	90	98	607	
Bedlington ...	525	148	...	...	345	23	2	5	2	...	117	346
Belford ...	56	47	...	...	7	...	1	...	1	...	56	1
Bellingham ...	64	41	...	...	14	4	...	...	1	...	26	19
Berwick-on-Tweed	191	76	3	...	40	10	2	11	12	37	50	48	
Norham & Islandshires	51	30	...	...	8	4	2	3	1	3	28	16
Bywell ...	206	28	1	...	145	17	...	...	3	12	20	126
Chollerton ...	52	30	...	...	17	1	...	...	2	...	30	14
Cramlington ...	276	90	4	...	170	6	...	2	4	...	59	155	
Embleton ...	57	33	2	...	19	2	...	1	...	...	22	11
Haltwhistle ...	110	10	...	...	83	3	...	...	5	...	14	81
Hexham ...	230	112	...	...	87	14	2	12	2	1	131	73
Longbenton ...	311	96	2	...	191	16	1	1	1	3	103	190	
Morpeth ...	167	57	...	...	63	5	11	5	8	18	60	75
Newburn...	294	90	1	...	158	15	8	6	6	10	121	189	
Stamfordham ...	34	4	...	...	17	3	...	...	...	10	...	...
Northumberland S.E. ...	580	111	1	...	434	23	4	3	1	3	104	412	
Gosforth ...	248	107	3	...	105	11	5	...	13	4	122	105	
Ponteland ...	73	27	...	...	39	4	...	1	1	1	35	45
Rothbury ...	62	42	3	...	10	2	...	...	4	1	35	7
Wallsend...	833	375	1	...	373	50	4	16	8	6	382	397	
Warkworth ...	167	30	3	...	104	8	3	2	11	6	16	108	
Whitley ...	459	143	2	...	233	19	27	...	20	15	140	249	
Wooler ...	112	91	1	...	8	5	...	1	1	5	85	6	
	6,174	2,008	32	...	3,303	302	81	74	135	239	1,901	3,388	

VENEREAL DISEASES REGULATIONS.

The treatment centre provided for County patients under the scheme undertaken by the County Council in conjunction with neighbouring authorities, is at the Royal Victoria Infirmary, Newcastle upon Tyne. In the following table, particulars are given in relation to treatment during 1933, and (for comparison) 1932.

	1932.			1933.		
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
1. Under treatment or obser- vation at beginning of year	258	86	344	268	103	371
2. Returned for treatment after having ceased to at- tend during any previous year	34	14	48	33	19	52
3. Dealt with for the first time	283	147	430	332	140	472
4. Number of cases dealt with for the first time known to have received treatment at other Centres	11	2	13	16	2	18
5. Discharged after completion of treatment	125	62	187	169	74	243
6. Ceased to attend before com- pletion of treatment ...	161	69	230	144	67	211
7. Number of cases which ceased to attend after com- pletion of treatment but before final tests of cure ...	14	10	24	7	5	12
8. Transferred to other Centres, etc.	18	5	23	30	10	40
9. Under treatment or observa- tion at end of year ...	268	103	371	299	108	407
10. Cases (included in Item 6) which failed to complete one course of treatment ...	30	16	46	17	20	37
11. Total number of attendances	6,301	2,698	8,999	6,734	3,037	9,771
12A. Total number of in-patients admitted for treatment during the year	5	10	15	11	9	20
12B. Aggregate number of in- patient days of treatment given	94	547	641	152	568	720
13. Number of cases of congeni- tal syphilis... ..	5	13	18	14	14	28

Irrigation stations are open, morning and evening, for gonorrhoea patients independently of the clinics.

The travelling expenses of necessitous patients to and from the clinics, are borne by the County Council.

Opportunity is afforded to medical practitioners in the area for consultations with the Medical Officer of the treatment centre, and they occasionally attend the clinics

Bacteriological examinations under the scheme are carried out at the Durham University College of Medicine, Newcastle upon Tyne.

The following statement gives the number and kind of tests undertaken at the laboratory during 1933 and indicates the extent to which medical practitioners availed themselves of the facilities provided by the County Council for such examinations.

Nature of Test.	Number of Tests.	
	For Treatment Centre.	For Practitioners.
<i>Microscopical—</i>		
For detection of Spirochetes	—	—
For detection of Gonococci	—	53
Other examinations—		
Urine for detection of Gonococci	—	2
<i>Serum tests—</i>		
For Wassermann reactions	829	624
Others for Syphilis :—		
C.S. fluid	—	30
Ascitic fluid	—	1
For Gonococcal infection	4	3
Totals	833	713

Patients who do not Complete Treatment.

The following table indicates the percentages of patients who failed to complete treatment during the year. The figures for the year 1932 are also included for comparison. It will be observed that, with one exception, the figures showed an improvement on the previous year :—

		1932.		1933	
		Male.	Female.	Male.	Female.
Syphilis		32.0%	43.5%	29.7%	35.4%
Gonorrhoea		39.7%	34.1%	26.7%	35.6%

In-patients are included in the above figures, as they attend the out-patients clinic after their discharge from the ward.

The following table indicates the number of patients who attended the Out-patients Clinic during the year :—

		Male.	Female.
Syphilis		215	130
Gonorrhoea		326	72

MATERNITY AND CHILD WELFARE.

Professional Nursing in the Home.

The County Council do not undertake any nursing service in the home, and this continues to be carried out by the County Nursing Association to whom grants are made for the purpose. Through the various district nursing associations the sick are nursed either in their own homes by the nurses making daily visits, or by the provision of resident cottage nurses.

The County Council make an annual grant of £510 to the General Funds of the Association, which money is apportioned to the local areas at the discretion of the Executive Committee, of which the

County Medical Officer is a co-opted member. Close co-operation exists in many parts of the County between the district nurses and the health visitors of the County Council, and increasing numbers of district nurses are becoming associated with the Council's Maternity and Child Welfare scheme by attendance at the Child Welfare Centres and Antenatal Clinics where they give valuable help by their service. This will tend to promote a more uniform and efficient system of care for mother and child.

Infectious Diseases.

This is not undertaken by the County Nursing Association except in a few instances in the more remote parts of the County where the resident system of nursing is in vogue.

Training as Midwives.

The County Council in accordance with Circular 559 of the Ministry of Health, 1925, is empowered to make grants for the provision of newly trained nurse-midwives to work in the County. A grant of £850 was made to the County Nursing Association for this purpose.

The County Council does not employ (nor does it pay any subsidy to) practising midwives. The County Nursing Association staff are all qualified midwives and act as such or as Maternity Nurses as occasion requires.

Midwives Acts, 1902 and 1926.

The County Council is the Local Supervising Authority under the Midwives Acts for the Administrative County. The number of midwives who notified their intention to practise during the year is as follows :—

Total Number of Midwives.	TRAINED. Attached to District Nursing Associations.	Working Independently.	Untrained or Bona-fide.
275	222	52	1

During the year 27 midwives left the County.

The inspection of the midwives employed by the County Nursing Association is carried out by the Superintendent of that Association, and midwives practising independently are inspected by the Superintendent of Health Visitors. Both officers are under the supervision of, and report direct to, the County Medical Officer; 1,037 visits of inspection were made.

Cases Taken.

In 3,822 cases the midwife was engaged as a Maternity Nurse, but in 1,346 of these cases, owing to the medical attendant not being present at the time of delivery, she acted as a midwife; 2,379 cases were attended by midwives as such.

The number of births (including still-births) notified was 6,578, but the number attended by these midwives was 6,201.

Still-Births.

The number of still-births notified by midwives was 31.

Medical Assistance.

A midwife is required, by the rules of the Central Midwives Board, to call in medical assistance for all cases of illness or obstetrical emergency which arise in her practice, and must send a copy of the Medical Aid form to the local Supervising Authority. In the 2,379 cases attended by midwives there were 360 notices that such attendance was necessary.

TABLE 1.

Table shewing numbers of Births and numbers of Deaths under one year in Urban and Rural Districts and number of Deaths of Infants under one year investigated by Health Visitors.

	Alnwick Urban.		Amble Urban.		Berwick-on-Tweed Borough.		Cramlington Urban.		Earsdon Urban.		Morpeth Borough.		Newbiggin Urban.		Prudhoe Urban.		Rothbury Urban.		Seghill Urban.		Weetslade Urban.		Whitley & Monkseaton Urban.		Seaton Delaval Urban.		Alnwick Rural.		Belford Rural.		Bellingham Rural.		Castle Ward Rural.		Glendale Rural.		Haltwhistle Rural.		Hexham Rural.		Morpeth Rural.		Norham & Islandshires Rural.		Rothbury Rural.		TOTAL.		GROSS TOTAL.																																					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.																																						
Number of Legitimate Births ...	56	53	38	31	96	89	63	62	116	86	66	60	55	53	75	4	1	24	24	76	63	137	114	61	47	73	70	20	35	31	37	86	83	48	49	51	59	133	115	178	145	36	29	28	24	1529	1404	2933																																						
Number of Illegitimate Births ...	2	4	7	1	5	7	3	1	5	3	5	5	1	2	4	2	...	1	2	1	3	1	2	1	2	2	4	1	...	1	2	5	5	3	5	2	3	5	6	6	11	5	...	5	2	2	79	66	145																																					
Total number of Births ...	58	57	45	32	101	96	66	63	121	89	71	65	56	55	57	77	4	2	26	25	79	64	139	115	63	49	77	71	20	36	33	42	91	86	53	51	54	64	139	121	189	150	36	34	30	26	1608	1470	3078																																					
Deaths of Infants under 1 year	Legitimate		...	5	1	11	5	4	4	17	6	6	8	2	...	7	3	5	2	9	3	4	1	3	4	6	3	...	2	4	4	6	2	3	2	4	2	2	5	14	10	2	1	...	1	114	69	183																																		
	Illegitimate		1	1	1	1	1	1	1	1	1	1	...	1	5	7	12																																						
Infantile Mortality Rates (per 1,000 births) ...	6.1	8.6	...	6.2	...	10.9	...	11.7	...	1.8	...	8.2	NIL	...	13.7	...	8.4	...	2.4	...	7.1	...	6.8	...	3.6	...	10.6	...	5.1	...	4.8	...	5.1	...	2.7	...	7.7	...	5.7	...	1.8	6.3																																						
Number of Deaths investigated (Legitimate) ...	5	1	11	5	4	4	17	6	6	8	2	...	7	3	5	2	9	3	4	1	3	4	6	3	...	2	4	4	6	2	3	2	4	2	2	5	14	10	2	1	...	1	114	69	183																																					
Number of Deaths investigated (Illegitimate)	1	1	1	1	1	1	1	1	1	1	1	...	1	5	7	12																																						
Total number of Deaths (under 1 year) investigated ...	5	2	11	6	4	4	17	6	7	9	2	...	8	3	5	2	9	3	5	1	3	5	7	3	...	2	4	4	6	3	3	2	4	2	2	5	15	11	2	2	...	1	119	76	195																																					
Causes of Death of Infants under 1 year in urban & rural districts																																																																																						
Premature Birth	2	2	1	...	6	4	1	2	2	2	3	...	3	1	2	...	1	2	4	1	2	1	2	1	3	...	1	...	1	1	3	4	2	1	39	22	61																																					
Con genital Debility, Malformation, Difficult Labour ...	1	1	2	1	2	1	4	1	2	2	1	...	1	1	...	1	1	1	...	1	...	2	1	1	2	1	...	2	1	...	2	3	2	25	17	42																																						
Asphyxia, Want of Attention	1	1	2	...	1	2																																					
Purpura Haemorrhagica	1	1																																					
Haematemesis Neonatorum...	1	1																																				
Bronchitis, Pneumonia,																																				
Influenza ...	1	1	1	2	2	...	2	3	2	1	...	2	1	...	1	1	3	1	1	1	1	4	...	1	19	13	32																																						
Erysipelas	1	...	1	3	1	4																																				
Inattention at Birth	1	1	2																																				
Tubercular Meningitis	1	1	2	1	3																																				
Specific Disease	1	1	...	1																																				
Gastro Enteritis	...	...	...	...	2	1	1	1	1	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...																																										

TABLE 2.

Investigated Cause of Deaths of Infants under one year, and Children aged 1-5 years, with age periods at which death occurred.

[illegible]

TABLE 3.

Investigated Cause of Deaths of Illegitimate Children
under the age of one year, arranged in sanitary areas.

	Alnwick Urban.		Berwick upon Tweed		Morpeth Borough.		Prudhoe Urban		Whitley & Monkseaton Urban.		Seaton Delaval Urban.		Alnwick Rural.		Castle Ward Rural.		Morpeth Rural.		Norham & Islandshires Rural.		TOTALS.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of Illegitimate Births in Administrative County ...	2	4	5	7	5	5	4	2	2	1	2	2	4	1	5	3	11	5	...	5	40	35
Number of Deaths under one year	...	1	...	1	1	1	1	...	1	...	...	1	1	...	1	1	1	1	...	1	5	7
Number of Deaths investigated	...	1	...	1	1	1	1	...	1	...	...	1	1	...	...	1	1	1	...	1	5	7
CAUSE OF DEATH.																						
Bronchitis & Pneumonia...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Asphyxia—Want of Attention	1	...	1
Wilfully Suffocated	1	...	...	...	...	...	1
Inattention at Birth	1	...	...	...	1	...
Enteritis	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
Congenital Debility—
Malformation—Difficult Labour	1	1	...	...	...	...	...	1	...	...	...	...	...	...	...	2	1
Prematurity	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	1	2
TOTAL...	1	...	1	1	1	...	1	...	...	1	1	...	...	1	1	1	...	1	5	7

When midwives call in medical assistance the local Supervising Authority becomes responsible, under the Midwives Act, 1918, for the payment of the doctor's fee on a scale fixed by the Ministry of Health. As each claim for payment is received from a medical practitioner a form is despatched to the patient pointing out that such claim for fees has been made by her doctor and stating that they may be recovered under certain circumstances. It is further pointed out that should she be unable to refund the whole of the claim made by the doctor, she should give particulars of her financial circumstances on the form provided, which will enable the special sub-committee to consider her application for the remission of the whole or part of the debt. During the year the total fees paid amounted to £452 3s. 4d., of which £93 7s. 6d. was afterwards recovered from the patients.

Ante-natal Care of Mothers.

This work develops under great difficulties. There is a double prejudice, many of the mothers showing great diffidence in consulting a doctor ante-natally, whilst many of the older practitioners are disinclined to stress the importance of ante-natal examination. It would appear that a younger generation of medical men, who have been trained and educated to believe in the necessity for the medical control of all expectant mothers, must arise before much progress is likely to be made.

In the meantime everything that is possible is being done to inculcate into midwives the importance of the subject and this appears, at present at any rate, to give better results.

There are administrative difficulties. There is little doubt but that the correct person to conduct an ante-natal examination is the doctor, who will, or may be, called in to attend the woman in her confinement. It is really doubtful whether, with the exception of a few isolated instances, *ad hoc*, ante-natal clinics are very successful. The employment of a whole-time medical officer is open to rejection from the standpoint that he or she is not engaged in active general practice. On the other hand, if a General Practitioner who is living in the district is employed, other doctors will decline to have their patients examined by him on the ground that they may lose their patients.

The smaller the place the more this is evident, and in a village where there are only two practitioners who are working in perfect amity it is impossible to staff a clinic otherwise than on the rota system. The only solution appears to be to pay a fee to the medical men who are recommended by midwives for this purpose.

The five centres established are still in existence, viz. :—Cramlington, Dudley, Haltwhistle, Prudhoe and Whitley Bay. A further clinic was opened at Shiremoor during the year.

The following statement indicates the work done :—

Name of Clinic.	Opening of Clinic.	No. of Sessions Clinic was open.	No. of Mothers attending.	No. of Ante-natal attendances.	No. of Post-natal attendances.	Consultations.
Cramlington	Fortnightly	18	15	24	—	24
Dudley ...	Monthly ...	12	23	38	1	39
Haltwhistle ...	Monthly ...	12	17	38	14	48
Prudhoe ...	Fortnightly	26	97	153	58	194
Shiremoor ...	Monthly ...	11	27	75	15	86
(Opened February)						
Whitley Bay	Monthly ...	13	38	71	7	68

Consultant Obstetricians.

The same panel of consultant obstetricians is available as under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926.

In the rural areas patients who have been examined ante-natally by their own doctors and are considered to require further specialist examination are sent to Newcastle, after appointment has been made, to be seen by one of the panel of consultants. Consultation fees and the travelling expenses of the patient and a friend are paid by the County Council.

During the year ten women availed themselves of the opportunity offered.

The following statement indicates the conditions found on examination :—

Albuminuria; albuminuria and undersized pelvis; contracted pelvis; haemorrhage; nephritis; occipito—posterior presentation; primipara—contracted pelvis; primipara—head above brim; primipara—premature labour; uncertainty *re* presentation.

Dental Treatment of Mothers.

Dental treatment continues to be provided at the Prudhoe Clinic and is much appreciated; the following indicates the work done :—

Number of Patients.	Attendances made.	Extractions.	Scalings. Fillings.	Other Operations.	Impressions taken.	Fees Received.
55	263	402	39	69	58	£20 12 6

Arrangements are being made to further develop this work in the immediate future.

Maternal Mortality.

The following shows the Maternal Mortality rates classified under the headings of Puerperal Sepsis and other causes, and for the purposes of comparison figures are also included below for the whole of England and Wales.

Year.	Puerperal Sepsis.		Other Puerperal Causes.		Total Deaths.	Rate per 1,000 Births.	Total Births.
	Deaths.	Rate per 1,000 Births.	Deaths.	Rate per 1,000 Births.			
1924	6	0.66	18	1.97	24	2.63	9,125
1925	9	1.04	30	3.47	39	4.51	8,634
1926	5	0.60	24	2.88	29	3.48	8,345
1927	12	1.61	15	2.01	27	3.62	7,470
1928	6	0.80	18	2.40	24	3.20	7,486
1929	11	1.60	22	3.20	33	4.80	6,885
1930	17	2.41	22	3.13	39	5.55	7,025
1931	11	1.62	18	2.64	29	4.26	6,801
1932	22	3.22	24	3.51	46	6.73	6,838
1933	20	3.04	22	3.34	42	6.38	6,578

England and Wales—

Puerperal Sepsis 1.83

Other Puerperal Causes 2.68

4.51

There were four fewer deaths this year than last, but as the total number of births is less, the fall in the rate is only partially reflected as compared with 1932. It will be observed, however, that the rate for the year under review is higher than any rate shown in the above table with the exception of that for 1932. It is a disconcerting fact that the number of maternal deaths shows a disposition to rise rather than to fall.

A Maternity and Child Welfare Officer is one of the outstanding requirements of the department and it is suggested that if such an appointment be made, that it would be one of the duties of such an officer to investigate intensively the attendant circumstances of each maternal death.

The following table indicates the various districts in the County where maternal deaths occurred :—

District.	Puerperal Sepsis.	Other Puerperal Causes.	Total.
Berwick Boro'	1	3	4
Blyth do. ... ..	...	4	4
Wallsend do.	4	2	6
Alnwick U.D.	1	1	2
Amble U.D.	1	...	1
Ashington U.D.	1	1	2
Bedlingtonshire U.D.	2	...	2
Cramlington U.D.	1	...	1
Gosforth U.D.	1	1	2
Longbenton U.D.	1	...	1
Newburn U.D.	1	1	2
Prudhoe U.D. ... ..	...	1	1
Seaton Delaval U.D. ... ..	...	1	1
Weetslade U.D. ... ..	...	2	2
Whitley & Monkseaton U.D.	1	1	2
Belford R.D. ... ..	...	1	1
Castle Ward R.D. ... ..	...	1	1
Hexham R.D.	1	1	2
Morpeth R.D.	3	1	4
Norham & Islandshires R.D.	1	...	1
	20	22	42

Maternity Hospitals.

The County Council does not maintain any Maternity Hospitals, but five Hospitals have beds available for maternity cases at fees which vary according to the amenities provided :—

The War Memorial Hospital, Haltwhistle	...	2 beds.
The Willington Quay Maternity Hospital	...	12 beds.
The Wallsend and Willington Quay Maternity Hospital	... ..	8 beds.
Preston Hospital, Tynemouth	... ..	12 beds.
The Tynedale Hospital, Corbridge	... ..	11 beds.

Under the Council's scheme complicated cases or cases which the medical attendant cannot with safety deliver in the patient's home are received into the Princess Mary Maternity Hospital, 195 such cases being admitted, at a cost of £416 to the Council. Other cases are admitted to the Willington Quay Maternity Hospital and the Preston Hospital, Tynemouth.

Nursing Homes Registration Act, 1927.

The above Act came into force on 1st July, 1928, and repealed Part II. of the Midwives and Maternity Homes Act, 1926, which dealt with the registration of Maternity Homes. Under this Act all Nursing Homes are required to be registered by the Local Supervising Authority. Eight Homes are registered. No new application for registration or exemption was received.

Babies' Hospital.

To supplement the Maternity and Child Welfare Scheme, babies suffering from dietetic troubles and infantile ailments are, on the certificate of their own medical attendant, admitted to the Babies Hospital, West Parade, Newcastle upon Tyne. During the year 23 infants received treatment in this Hospital at a cost of £71. This included 3 cases of Cleft Palate and Hare Lip, all of which were successfully operated upon.

Ophthalmia Neonatorum.

Arrangements are made for the treatment of these cases at Willington Quay Maternity Hospital, or at the Preston Hospital, Tynemouth, either alone or accompanied by the mother.

Ophthalmia Neonatorum is defined as any purulent discharge from the eyes of an infant within twenty-one days of birth, and the duty of notifying cases is placed on the doctor in attendance; 15 such cases were notified in a total of 6,326 live births; of the 2,379 infants delivered by midwives, medical aid was summoned on account of discharging eyes in 7 cases, a diagnosis being made of Ophthalmia Neonatorum in 3 cases. No impairment of vision was reported, all cases recovering satisfactorily; four were nursed in Hospital, one by a Health Visitor, and the remainder by District Nurses in the home.

Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926.

These Regulations require medical practitioners to notify to the District Medical Officer of Health any febrile condition occurring in a woman within 21 days after childbirth or miscarriage in which a temperature of 100·4 degrees Fahrenheit has been sustained during a period of 24 hours, or has recurred during that period. Under these Regulations the County Council has arranged that medical practitioners may obtain any or all of the following services for cases notified within its Maternity and Child Welfare area :—

- (a) The services of a Consultant Obstetrician ;
- (b) Bacteriological examination of patient's discharges ;
- (c) Skilled nursing service ;
- (d) Removal of patient to Hospital ;
- (e) Provision of serum.

The County Council's panel of Consultants includes Professor Rankin Lyle, M.D., Mr. Farquhar Murray, M.D., F.R.C.S., Mr. Harvey Evers, M.S., F.R.C.S., and Mr. F. E. Stabler, M.D., F.R.C.S.

During the year 28 cases of Puerperal Pyrexia and 8 cases of Puerperal Fever were notified. Consultant services were obtained in 6 cases; 21 women were removed to Hospital; 15 cases were nursed at home, and 2 deaths occurred.

Midwives' Practice.

Amongst the 2,379 women who were delivered by midwives, 23 had rises of temperature for which medical assistance was sought; 3 of these were diagnosed as Puerperal Fever and admitted to Hospital, together with 8 other women whose temperatures were due to minor causes; the remaining 12 cases were nursed at home.

Health Visiting Service.

In administering the Council's scheme for the Notification of Births Acts, the County is divided into 33 districts,, in each of which is a resident Health Visitor who carries out all the home visiting in that area; also Maternity and Child Welfare work, School Medical Service and the Tuberculosis Services. In addition she attends Ante-natal Clinics, Child Welfare Centres; Ante-natal Dental Clinics; Minor Ailments Clinics; Medical Inspections of school children; School Dental Clinics; Ophthalmic Clinics and the Tuberculosis Dispensaries. One health visitor is employed in the Wallsend area upon Tuberculosis work alone.

Under the scheme, all infants under the age of five years are visited at intervals which vary according to the age and circumstances of the child and the requirements of the home. General advice on Hygiene, clothing, food, and infant care and nurture is given, together with, when found necessary, practical demonstration in the home. Generally speaking the arrangements made for the care of the child are adequate.

The following is a summary of the number of visits made by the Health Visiting staff under the Maternity and Child Welfare scheme.

Live Births registered in Administrative County.	First Visits to Infants.	Re-visits to infants under the age of 1 year.	Visits to Children, age 1—5 yrs.	Ante-Natal Visits.	
				First Visits.	Re-Visits.
3,078	2,785	11,244	28,858	331	362

Training and Supply of Health Visitors.

The scheme whereby loans are advanced to selected candidates to enable them to undergo training in Health Visiting, has been in abeyance this year, vacancies on the staff having been filled by advertisement.

Population and Number of Births Registered.

Population (1931 Census).	Registered Births.		Notified Births.		% Notified.
	Live	Still	Live	Still	
215,001	3,078	115	2,263	45	72.00

Infant Mortality.

The following shows the comparative rates of infant mortality for the County, per 1,000 births :—

Infant Mortality per 1,000 births for County area, for maternity and child welfare.	Infant Mortality per 1,000 births for whole of County including autonomous areas.	Infant Mortality per 1,000 births for England and Wales.
63	71	64

Death Rate for Illegitimate Children.

Of the 145 illegitimate children born, 12 died before they reached the age of one year. The following table gives the comparison with children born in wedlock.

No. of legitimate births in Council's area	...	...	...	...	...	2,933
No. of illegitimate births in Council's area	...	...	...	...	...	145
Total births						3,078
<hr/>						
No. of deaths of legitimate infants	...	183	=	62 deaths per 1,000 legitimate births.		
No. of deaths of illegitimate infants	...	12	=	83 deaths per 1,000 illegitimate births.		
Total deaths						195
						= 63 deaths per 1,000 births.

Child Welfare Centres.

There were 19 Infant Welfare Centres in the County at the beginning of the year, all being under the control of, and financed by, the County Council. These are staffed by part-time medical practitioners and in three instances by one of the Council's medical officers. These Centres are held in church halls, etc., many of which are not suitable for the purpose for which they are used.

The following is a summary of the premises :—

Church or Chapel rooms	...	...	...	...	9
Institutes, Village Halls	...	...	...	...	4
Wooden Hut	...	...	...	...	1
Cottage	...	...	...	...	1
Offices rented from Local Authorities	...	...	...	...	2
Council House	...	...	...	...	1
Specially erected Child Welfare Centre	...	...	...	...	1

Supply of Milk to Expectant and Nursing Mothers and Children under 3 years of age.

Milk is issued to mothers and children attending the Centres, dried milk only being supplied because of its convenience in handling, and the fact that its concentration can be readily understood and adapted by the mothers to the needs of their infants.

Milk is supplied free or at half price according to circumstances to :—

- (a) Nursing mothers ;
- (b) Expectant mothers during the last two months of pregnancy ;
- (c) To children under the age of 3 years and in exceptional cases on receipt of a medical certificate, up to 5 years of age.

All applicants are required to fill in a form giving full particulars of income, name of employers, number in family, rent paid, etc., and when this information is verified milk is given for a period of four weeks to persons who are, by their circumstances, entitled to receive it, either free or at a reduced charge. Ambrosia, Glaxo, Ostermilk, Virol, etc., are supplied and also sold at a reduced retail price in the circumstances mentioned above to any mother attending the Centre.

TABLE 4.

Infant Welfare Centres.—Report on Work for Year ended December 31st, 1933.

NAME OF CENTRE.	Number of Children transferred from 1932 Register to 1933 Register.			Number of Children who attended a Centre for the first time during the year.			Number of Children who attended during the year and at end of the year.		Consultations made by Medical Officer.		Ante-natal Mothers attending the Centre.				Mothers and Infants.	Visits of Medical Officer for Consultation.	Number of Sessions each Centre was open.				Number of Attendances made by Health Visitors.			Number of Deaths of Children attending the Infant Welfare Centres.		Day and usual hour of Session. Consultations alternate weeks by Medical Officer.	Name of Medical Officer attending.
	Aged under 1 year.	Aged 1—5 years.	Aged under 1 year.	Total Attendances.	Aged 1—5 years.	Total Attendances.	Under 1 year.	Between 1 and 5 years.	Mothers.	Children.	Total Number Attending.	First Visits.	Subsequent Visits.	Consultations with Medical Officer.			No. of Cases who received Milk during the year.	Number of Sessions.	For Distribution of Food.	For consultation with Doctor or Health Visitor.	For Combination of these Services.	For Distribution of Food.	For Consultation only.	For Combination of these Services.	Under 1 year.			Aged 1—5 years.
Abbotkirk	40	43	70	1,058	25	507	45	119	150	189	...	...	...	...	58	21	...	...	51	...	...	51	1	1	Monday, 2—4 p.m.	Dr. Bunting, Asst. County M.O.H.
Archie	47	72	76	946	48	1,037	66	149	346	376	9	9	...	3	52	20	50	50	50	50	50	50	1	2	Monday, 2—4 p.m.	Dr. O'Sullivan, Asst. County M.O.H.	
Barkworth	64	119	92	1,292	10	1,171	75	150	570	586	...	...	...	...	49	23	48	48	51	48	...	51	3	1	Wednesday, 2—4 p.m.	Dr. Glen Davison.
Berwick	43	17	85	1,169	6	333	71	52	...	80	...	...	...	...	38	22	51	51	51	51	...	51	...	...	Tuesday, 2—4 p.m.	Dr. MacLagan, M.O.H.
Cramlington	45	53	84	742	7	479	69	120	439	457	15	15	16	31	103	18	51	51	51	51	51	...	1	...	Wednesday, 2—4 p.m.	Dr. Quinn.	
Dalry	35	83	81	795	10	481	62	136	836	836	23	22	16	38	117	26	51	51	51	51	51	...	2	...	Tuesday, 2—4 p.m.	Dr. Thompson.	
Hawthistle	27	60	46	1,180	9	818	41	114	852	817	23	8	26	34	106	37	50	...	50	50	...	50	...	1	Thursday, 2—4 p.m.	Dr. Thompson.	
Lynemouth	18	17	55	637	21	253	52	54	...	...	4	4	41	...	35	...	...	...	51	...	...	51	2	1	Tuesday, 2—4 p.m.	—
Morpeth	55	31	85	1,269	1	292	65	109	1,013	1,013	...	...	...	...	40	48	51	51	...	...	51	51	5	2	Monday, 2—4 p.m.	Dr. Dickie.
Newbrazin-by-the-Sea	96	120	111	2,078	27	878	99	172	41	151	18	16	16	...	138	40	...	...	51	...	...	51	...	2	Monday, 2—4 p.m.	Dr. Hart Jackson.
Pegswood	16	19	45	596	3	223	41	46	557	557	...	...	...	...	18	46	...	...	51	...	...	51	1	1	Tuesday, 2—4 p.m.	Dr. Dickie.
Priddy	78	70	96	1,487	17	985	82	71	358	451	164	97	67	160	46	22	...	...	51	...	...	51	1	2	Wednesday, 2—4 p.m.	Dr. Dewell.
Red Row (Broomhill)	26	59	80	606	6	303	60	111	284	301	12	12	37	...	58	25	51	51	51	51	51	51	...	...	Tuesday, 2—4 p.m.	Dr. Scott.
Seaton Burn	32	36	76	841	8	316	51	99	445	445	...	...	...	...	36	26	...	...	51	...	...	51	1	1	Wednesday, 2—4 p.m.	Dr. Ogilvie.
Seaton Delaval	68	71	88	1,779	6	1,010	74	156	...	183	...	...	...	...	97	23	...	...	51	...	...	51	2	...	Thursday, 2—4 p.m.	Dr. Anderson, M.O.H. Cramlington.
Sehill	19	65	45	775	2	700	29	96	4	288	3	3	5	3	31	37	...	...	51	...	...	51	4	...	Monday, 2—4 p.m.	Dr. Henderson.
Seaton	49	50	56	1,350	36	1,315	45	129	507	576	62	27	35	62	110	38	52	52	52	52	...	52	...	...	Wednesday, 2—4 p.m.	Dr. Thompson.
Seaton	19	45	48	624	13	339	40	85	420	436	...	...	...	...	30	25	...	...	51	...	...	51	1	1	Wednesday, 2—4 p.m.	Dr. Ogilvie.
Weston Bay	87	82	148	2,722	18	453	108	205	801	816	38	31	65	95	101	...	51	51	51	51	51	51	2	3	Monday, 2—4 p.m.	Dr. Thompson.	

CENTRES FOR THE SALE, Etc., OF MILK.

Dunston	8	22	19	...	2	...	16	21	...	...	2	2	14	...	55	...	51	...	...	51	...	...	...	...	Thursday, 2.30—3.30 p.m.	—
Hadden Bridge	10	26	23	...	3	...	...	...	...	...	...	...	...	...	24	...	50	...	...	50	...	...	1	...	Tuesday, 2—4 p.m.	—
North Seaton	8	2	9	...	2	...	7	10	...	...	...	...	...	...	32	...	51	...	...	51	...	...	1	...	Tuesday, 10—11 a.m.	—

The following table shows the quantities sold or distributed :—

	Sold at reduced retail price.	Sold at half reduced retail price.	Distributed free.
Dried Milk	13,329 lbs.	3,072 lbs.	41,549 lbs.
Virol and Numol	1,078 lbs.	11½ lbs.	395 lbs.
Maltoline, etc.	254 lbs.	7½	38½ lbs.

The following table indicates the cost to the County in supplying these goods, etc., free or at half price; also the amount spent during the year by purchasers :—

	Purchased by Parents.		Cost to County Council.	
	At reduced retail price.	At half reduced retail price.	At half reduced retail price.	Free.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Dried Milk	976 13 11	115 11 9	77 11 6	2,602 18 6
Virol and Numol	107 16 0	0 11 6	0 11 6	39 5 10
Maltoline, etc.	16 16 8	0 5 0	0 3 9	2 4 11
Totals	1,101 6 7	116 8 3	78 6 9	2,644 9 3

Prevention and Treatment of Crippling in Infants.

Facilities are provided for the treatment of children with crippling defects at the Orthopaedic Centres in the County. Defects may be discovered at the Child Welfare Centre, by the Health Visitor during her home visiting, or referred by Midwives, District Nurses, or Medical Practitioners. When hospital treatment is indicated the child is received into the W. J. Sanderson Orthopaedic Hospital School for Crippled Children, Gosforth; out-patient treatment is given in the Clinics, or in the home, by the Orthopaedic Sisters employed by the Council.

Clinics are provided at Alnwick, Ashington, Bedlington, Gosforth, Hexham, Morpeth, and Rothbury.

Eleven children were treated and six of these were admitted into hospital.

Birth Control.

In a Memorandum issued by the Ministry of Health limitations are laid down by the Ministry upon local authorities in the provision of Birth Control Institutions. It is not usual at Infant Welfare Centres to give advice upon this subject and the Minister considers that, should it be included in the Infant Welfare Centre scheme, it would be likely to damage the proper work of the Centre, which should only deal with expectant and nursing mothers and young children.

The gist of the Memorandum is that contraceptive advice should be given only in cases where further pregnancy is likely to endanger health, and that no sanction, which may be necessary for the establishment of a separate Birth Control Clinic, will be given unless compliance with this condition is indicated. No special Clinics have been set up, and no appliance has been supplied by the Council. A

woman who is considered by her medical practitioner to be in need of such advice is recommended to one of the Birth Control Clinics which are established at Ashington and Newcastle; a fee of 7/6 is paid on her behalf to the voluntary institution. Some of the main reasons for recommendation to Clinics are the number of abortions which are taking place in the County and the large number of women in whom "further pregnancies would be detrimental to health."

Infant Life Protection.

The powers and duties relating to the protection of infant life contained in Part I. of the Children Act, 1908, were transferred to Maternity and Child Welfare Authorities by the Local Government Act of 1929. Under this Act the duties are carried out by the County Council except in those districts autonomous for Maternity and Child Welfare. The main object is to secure that any child under seven years of age who is maintained for reward shall be kept under supervision. Important alterations took place in this Act by the Children and Young Persons Act, 1932, which came into operation on January 1st, 1933 :—

- (a) The age limit of protection was raised to nine years;
- (b) Seven days' notice is required to be given before the reception of a child for reward and not less than 48 hours before the reception of any subsequent child. In the case of a child being received in an emergency, proof that notice was given within 12 hours afterwards constitutes a valid defence;
- (c) Reward is defined as an undertaking to promise to pay or give money or money's worth, irrespective of whether there is any intention of making profit;
- (d) Foster parents must now give notice in writing of removal seven days before such removal, and in the case of a death, notice must be given within 24 hours both to the Coroner and to the County Medical Officer.

Failure to do so is an offence under the Act.

- (e) Authorities are empowered to fix the number of children which may be kept on any premises, and may impose conditions to be complied with.
- (f) In the conditions under which application may be made for removal of a child the additional reasons for such application are strengthened by the addition of the words "old age, infirmity, ill health," children may also be removed from "any environment which is detrimental to the infant."

The provisions do not apply to relatives or legal guardians who take children for reward or, in the case of illegitimate children, to persons who would be so related if the children were legitimate.

- (g) Advertisements may not be published indicating that any person or Society will undertake or arrange for the nursing of any child under the age of nine years unless the name and address of the person or Society is stated.
- (h) Under this Act Infant Protection Visitors must be appointed and must satisfy themselves as to the health and well-being of the child, as well as give advice or directions concerning its health, nursing, and maintenance.

The County Council's Health Visitors are appointed as Infant Protection Visitors in their respective districts, and the County Medical Officer as the person to whom the various notices are to be sent.

Visits are made to the homes by the Health Visitors, and the children were kept under supervision.

The following indicates the position :—

No. of Foster Mothers.	No. of children received.	Number left the County.	Number died.	Number of visits.	Satisfactory Reports.
21	27	5	Nil.	161	158

No application to take a child was refused.

The homes generally are satisfactory, but there was some degree of overcrowding in two cases. One foster mother moved to a new house where the circumstances were somewhat better.

An unsatisfactory report was given in one case where the Health Visitor discovered a dirty home. This was remedied at once.

ORTHOPAEDIC TREATMENT.

Provision was made during the year for the treatment of patients of all ages suffering from Orthopaedic defects, with the exception of adults showing active tubercular symptoms. Institutional treatment was provided at the W. J. Sanderson Home, Gosforth, for children (particulars relating to these cases will be found in the Maternity and Child Welfare portion of this report on page 81), and at the Shropshire Orthopaedic Hospital, Oswestry, for adults; during the year one adult received treatment at this Hospital.

The following Clinics were in operation at the end of the year :—

Alnwick—The Infirmary.

Ashington—The School Clinic, Lintonville Terrace.

Bedlington—Y.M.C.A. Buildings.

Cramlington—26, Hawthorn Villas.

Gosforth—War Memorial Hall.

Hexham—War Memorial Hospital.

Morpeth—Congregational Church Hall, Dacre Street.

Rothbury—Jubilee Hall.

Those authorities which are autonomous for Maternity and Child Welfare purposes make their own arrangements for institutional treatment; the County Council Orthopaedic Clinics, however, are available for patients resident in these areas and the respective authorities pay 2/6 for each case received and treated; this charge covers massage, the application of plaster bandages and examination by the Orthopaedic Surgeon, but does not include the provision of splints or any medical treatment outside the Clinic.

BLIND PERSONS ACT, 1920.

Administration.

The Blind Persons Act in the County of Northumberland continues to be administered by the County Council. On January 1st, 1933, there were 482 blind persons on the County Register as compared with 459 on January 1st, 1932. 75 new cases were registered during the year; 50 persons died or left the County, and 2 cases were decertified, the figure on 31st December, 1933, thereby standing at 505.

Before blind persons are admitted to the register, it is necessary for them to be certified blind within the meaning of the Act by the County Ophthalmic Surgeon. 32 persons were refused registration during the year, as not coming within the legal category of blind persons.

In November the Committee decided to amend the scheme in accordance with the Minister's suggestions, and as a preliminary requested the Public Assistance Committee to amend the County of Northumberland (Poor Law) Scheme, 1929, so as to provide that—

- (a) All assistance to necessitous blind persons be provided exclusively by virtue of the Blind Persons Act, 1920, and not by way of poor relief and that
- (b) the functions of the Public Assistance Committee with regard to the provision of financial assistance to the sighted dependants of blind persons be assigned to the Blind Persons Act Committee in pursuance of section 4 (4) of the Poor Law Act, 1930.

Home Teachers.

There are three Home Teachers employed by the Council, the third having commenced duty in January, 1933, following her appointment in December, 1932. These Home Teachers visit the blind in their homes at regular intervals, supervising their welfare and rendering assistance in many ways. Every case referred to the County Medical Officer is investigated by the Home Teachers, who supply the necessary forms of application for registration, financial assistance, etc.

Suitable cases are taught Braille, Moon and useful handicrafts such as basket-making, rug-making, hand-knitting, etc. The following visits were paid by the Home Teachers during the period under review :—

	No. of Visits.
For social welfare	4,427
For supervision of home workers	153
For the giving of lessons	124
For investigation of new cases	381
	<hr/>
	5,085
	<hr/>

This figure represents an increase of 1,826 over the number of visits paid in 1932.

Home Workers and Casual Workers.

The number of approved home workers in the County remains the same as shown in last year's report, and is made up as follows :—

Piano tuners	2
Basket makers	2
Cane worker	1
Hand knitter	1
Hand and machine knitters	2
Boot and shoe repairer	1
	<hr/>
	9
	<hr/>

Under the home workers' scheme approved home workers receive a 50 per cent. subsidy in the case of men and 100 per cent. in the case of women up to a maximum of 8/- per week, except in the case of the two machine knitters. The block grant paid by the Ministry of Health

includes a sum for this purpose. At the end of 1933, there were 11 casual workers in the County who received domiciliary assistance at a fixed weekly rate or were paid wages on a piece-work basis.

Sales of Goods.

It is necessary for the Department to find a market for the articles made by these workers and sales are organised in various parts of the County. Four such sales were held during 1933; in addition to the disposal of a large number of articles, they act as an advertising medium, many private orders having been received as a result. Letters expressing satisfaction and appreciation of the work executed, have been received from time to time. Only articles of first class workmanship are offered for sale.

Indigent and Unemployable Blind.

In the case of persons who are indigent and unemployable the County Council make grants, bringing the personal income (from all sources) up to 18/- per week. Applications are received by the County Medical Officer and investigated by the Home Teachers. A very full co-operation exists between the Department and the Relieving Officers of the several districts. Every precaution is taken to verify the statements made. A special "Cases" Sub-Committee adjudicates upon these cases and makes recommendations to the parent Committee. Up to the present no residential period of qualification for these grants has been imposed. In the event of any person being decertified the circumstances are communicated immediately to the local Relieving Officer, in order that no unnecessary hardship will be suffered by blind persons through discontinuance of the grant. Domiciliary assistance is also granted in some cases to blind persons who are on the waiting list for admission to the Workshops.

The number of indigent blind persons who were receiving grants in December, 1933, numbered 237, the total sum of £5,742 10s. 1d. being expended during the year.

Workshops for the Adult Blind.

Five persons from the County were employed at the Breamish Street Workshops, Newcastle, during 1933, while 7 were awaiting admission on 31st December. Under the Scheme of the Ministry of Health—Section 102 (1)—of the Local Government Act, 1929, the Council contributes the sum of £50 per annum to the Workshops for each person on the County Register employed therein.

On 8th August, 1933, a joint meeting of the County Council, and Newcastle and Gateshead Corporations was held, when a tender amounting to £22,465 for the erection of the proposed new workshops for the Adult Blind, at Benwell, was recommended for acceptance and submission to the Ministry of Health.

On completion of the workshops, it is anticipated that all persons on the waiting list for admission will be absorbed.

Libraries for the Blind.

The County is served by two Libraries, the Northern Counties Library for the Blind, North Shields, and the National Library for the Blind, Manchester. Fifteen readers borrowed 567 books from the former Library during 1933, while 57 readers borrowed 1,839 books from Manchester during this period. These figures represent an increase of 557 in the number of books borrowed and 14 in the number of readers, which is most satisfactory. A grant of £68 was paid to the National Library for the Blind and also one of £23 to the Northern Counties Library.

Wireless for the Blind.

Under Section 1 of the Wireless Telegraphy (Blind Persons Facilities) Act, 1926, 91 certificates enabling blind persons to obtain free wireless licences were issued, as compared with 61 in the previous year.

The Department distributes receiving sets in the County on behalf of the British "Wireless for the Blind" Fund, the total number allocated up to December 31st, 1933, being 289. When wireless sets loaned to blind persons are not giving satisfactory service, they are overhauled voluntarily, being returned to the holders after the fault has been located and repaired. The Committee are much indebted to Mr. A. E. George for whole-hearted and generous assistance in this matter. On the death of blind persons the receiving-sets are returned to the Department, and after being overhauled are redistributed to persons on the waiting list. The sets are much appreciated and in some instances where blind persons are bedfast have been almost a blessing.

Education.

Eight children were receiving elementary education at the Royal Victoria School for the Blind, Benwell, under the auspices of the Northumberland Education Committee at the beginning of the year under review. The total number in December, 1933, was unaltered, two children having been discharged and two admitted during the year.

With regard to full-time courses of higher education for the blind, training was provided for eleven men and eight women of the County during 1933, making a total of 19 persons. Of this number 17 were trainees at Benwell Grange. During the year there were two admissions and six discharges at Benwell, leaving a total of 11 persons on the register on 31st December, six being women and 5 men, who received training as follows :—

Basket-making	...	...	...	...	...	...	2
Mattress-making	...	...	...	...	...	...	2
Machine knitting	...	...	...	...	...	...	1
Machine knitting and caning	...	...	...	...	...	...	5
Brush-making	...	...	...	...	...	...	1
							11
							11

In addition, one man studied at the Royal Normal College, London, for which College he won a scholarship in July, 1932, while another man received training in boot-repairing at Preston, Lancashire.

Financial assistance was rendered in deserving cases to trainees during their holidays. The County Council also helped to meet the cost of dental treatment and dentures received by two trainees at Benwell.

Prevention of Blindness.

Persons receiving periodical treatment under the Prevention of Blindness Scheme at the Royal Victoria Infirmary or Eye Hospital, Newcastle, are afforded travelling facilities at the expense of the County Council. Under this scheme, spectacles are also provided for necessitous persons who are in danger of becoming blind, two pairs of glasses and a contact lens having been provided during the year. Hospital treatment is also provided for children suffering from ophthalmia neonatorum.

Social Work.

The four Voluntary Associations in the County established at Blyth, Bedlington, Ashington and Cramlington catered for the social welfare of the blind in the respective districts, outings, concerts, musical evenings, etc., having been arranged. The County Medical Officer administers the Fund known as the Blind Persons Trust Fund, to which the National Institution for the Blind contribute the sum of £100 a year. Out of this Fund the Voluntary Associations are each paid an annual sum equivalent to 4/- for each blind person within their area. Blind persons who were not resident in any of these districts were compensated by being given a Christmas gift of 4/-, the money being distributed by the home teachers and health visitors.

The sum of £100 is wholly inadequate for this purpose; it is hoped to establish further associations in the immediate future.

